



TABLE OF CONTENTS

STAIRWAY TO HEAVEN:

Will the U.S. Economy Continue to Outperform?
Outlook for Growth and Inflation amidst Rising Risks

The Nation, Southern California, and Orange County

Anil Puri, Ph.D., and Mira Farka, Ph.D.

U.S. ECONOMIC OUTLOOK AND FORECASTS

	Overview	\
	Welcome to the (Tropic Thunder) Jungle: Crawling Through the "Last Inflation Mile"	. 16
	The Thunder of the Tropic: From Strong Growth to Moderate Stagflation	. 23
	Scorcher VI Global Meltdown: The World Goes to the Polls	. 33
ORAN	GE COUNTY, SOUTHERN CALIFORNIA, AND CALIFORNIA	
	Employment and Demographics	. 38
	How Impactful will AI be to Employment	. 42
	Housing	. 44
	Orange County Business Sentiment	. 47
	The State Budget	. 50
	Employment Forecasts	. 51

STAIRWAY TO HEAVEN: WILL THE U.S. ECONOMY CONTINUE TO OUTPERFORM? OUTLOOK FOR GROWTH AND INFLATION AMIDST RISING RISKS

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STAIRWAY TO HEAVEN

"There's a lady who's sure all that glitters is gold, And she's buying a stairway to Heaven!"

– Led Zeppelin, Stairway to Heaven

Overview

"I know who I am! I'm a dude playing the dude, disguised as another dude!"

- Kirk Lazarus, Tropic Thunder

War is hell but Hollowood is worse, is the message of *Tropic Thunder* — the gleefully irreverent, no-holds-barred, edgy satire about the making of a war movie to end all war movies. Its plot is simple: Plagued by the antics of its self-absorbed ego-eccentric star-studded cast, desperately over-budget, behind schedule, and in danger of being shut down, its director goes "guerrilla-style" by packing up the crew and dropping it in the Vietnam jungle rigged with hidden cameras. The only problem: Unbeknownst to them, the entire region is controlled by an armed heroin-producing gang who mistake our actors for DEA agents. Rude and crude, coarse and bold, the movie cheekily flouts taboos and ruthlessly digs deep into the shallowness of every aspect of the movie industry (and its fans): from the evil, foul-mouthed, soulless movie mogul, to overbearing over-committed method actors who never break role, over-the-hill action stars desperate for an academy award (and TiVo), morally conflicted agents, war movie tropes, and washed-up oversaturated sequels. It is hilarious, if not brilliant. But perhaps its most underrated feature is its comedic timing: Released in the summer of 2008, it is precisely what was needed to soothe the frayed nerves of a nation gripped by a deep recession and ravaged by a once-in-a-century financial crisis.

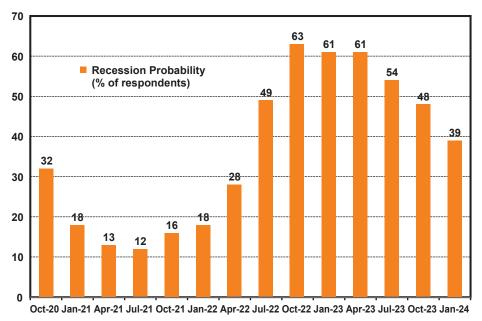
The U.S. economy has starred in its own version of *Tropic Thunder* over the past two years, enduring untold dangers and menacing risks managing not only to overcome but thrive in the process. Much like our motley crew of over-pampered over-preening actors who end up triumphantly defeating the paramilitary drug gang, the economy has managed to successfully dodge every obstacle on the way, at least thus far. The most aggressive rate hiking cycle in four decades, sky-high inflation, rising

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geopolitical risks, two hot wars, and a brewing cold war between the U.S. and China may be far off from an armed-to-the-teeth gang of heroin dealers in *Tropic Thunder*, but in normal times, they would be just as deadly to any recovery.

But these are not normal times, and the recovery from the pandemic was not a normal recovery. At the start of 2023, it was widely thought that America was on the brink of a recession. A full 70% of economists in the Bloomberg Survey expected the U.S. economy to fall into a recession sometime in 2023. In the Wall Street Journal Survey, almost two-thirds of economists expected a recession (Figure 1). The Conference Board put the probability at 99%. The Federal Reserve penciled in a shallow recession even as late as June 2023, with growth stalling and the unemployment rate rising by the end of the year. Much like Tugg Speedman in *Tropic Thunder* — "a dying star, a white dwarf headed for a black hole," — the economy was expected to keel over and collapse under the weight of rate hikes and rising risks.

FIGURE 1
The Recession that Never Was: Recession Predictions Have Declined (Wall Street Journal Survey, percent of respondents)



Instead, the American economy has, miraculously and astonishingly, powered on ahead. It ended 2023 with real GDP nearly 3% higher, posting one of the healthiest growth rates in a decade. Since March 2022, when the Fed embarked on its rate tightening cycle, the economy added a jaw-dropping 6.4 million jobs, 3 million of which came in 2023 (Figure 2). Consumption spending has remained robust. Retail sales grew by a healthy 4.2% last year, only a hair below the 4.4% pace in 2022 and higher than the 3.5% average pre-pandemic rate. Real business investments in structures rose at a dizzying rate of 13.2% — the highest since 2012 when the economy was exiting the Great Recession. Much of this is due to hefty investments in manufacturing plants — from EVs to semiconductors — propelled by lavish government support. Manufacturing construction has more than doubled from \$87 billion in November 2021 (prior to the passage of the infrastructure and CHIPS bills) to a current \$224 billion (Figure 3). Even troubled corners of the market seem to have turned around. After a shallow dip due to higher interest rates, home prices have turned around and risen to historical highs. The stock market has soared after a 2022 rout, rising by nearly 40% since October 2022. Productivity surged by 3.2% last year, outpacing its 25-year average and more than reversing its previous year's sharp decline.

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FIGURE 2 A Stellar Economy: Booming Real GDP and a Strong Labor Market (percent change from 2019)

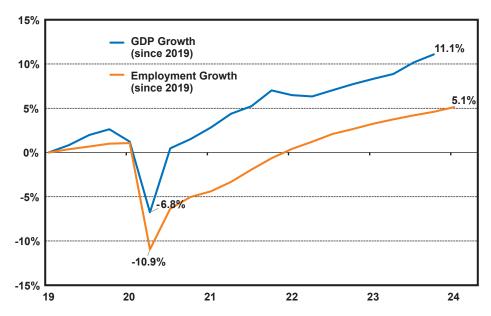
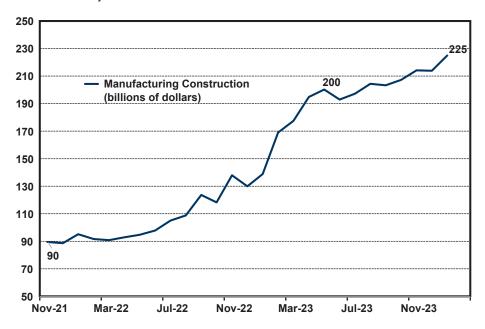


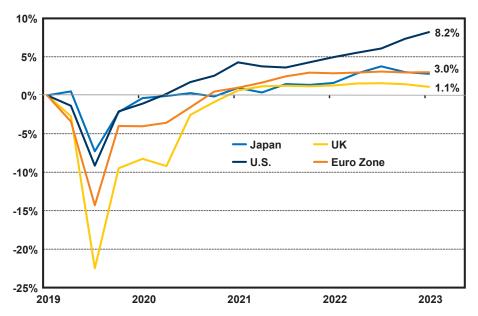
FIGURE 3
Manufacturing Construction Has Skyrocketed due to Fiscal Support (billions of dollars)



It isn't just the outperformance of expectations: The American economy has left everyone else in the dust. Since the end of 2019—a period that includes the COVID-19 pandemic and its aftermath—America's economy has grown by about 8.2% in real terms. During this same time, the Euro area has expanded by only 3%, Japan by 2.9% and Britain by a measly 1.1% (Figure 4). Perhaps more astounding is trend-growth: The U.S. is the only economy to have surpassed its pre-pandemic trend, with real GDP currently 0.2% above the path it would have grown had the pandemic never happened. Growth in the Euro area is around 2.2% below pre-pandemic projections, while China languishes a full 4.2% below pre-pandemic trends.

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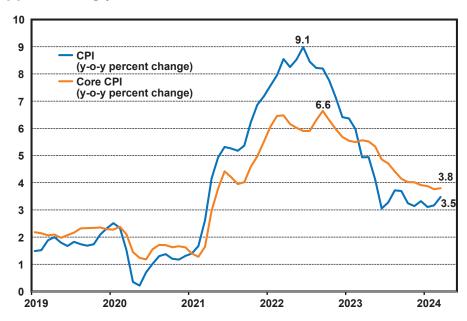
FIGURE 4
The U.S. Economy Has Left Everyone Behind
(real GDP growth, percent change since Q4 2019)



Most auspiciously, all this is happening against a much more benign background: Once raging seemingly out of control, inflation has cooled down dramatically. Consumer price index (CPI) inflation has declined from a 40-year high of 9.1% in June 2022 to a current 3.5% (Figure 5). The price index for personal consumption expenditures (PCE), a broader measure of the consumer basket, has stepped down from a peak of 7.1% to 2.5%. Even the infamously more stubborn measures of core inflation, which exclude volatile energy and food prices, have cooperated: Core CPI has retreated from a high of 6.7% to a current 3.8%. Core PCE — the Fed's preferred inflation measure — has fallen by half, from 5.6% to 2.8%. All are still outside the Fed's target of 2%, but there is no denying that significant progress has been made.

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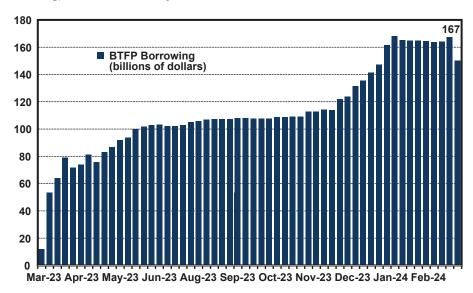
FIGURE 5
Much Progress on Inflation: Both CPI and Core CPI Have Eased
(y-o-y percent change)



Even a nascent banking mini panic in March 2023 was successfully quashed from turning into a full-blown banking crisis. The rot was stemmed from spreading thanks in large part to a gargantuan bail out by the Fed and the Treasury, which broke all cardinal rules of lending in a crisis. Depositors of troubled banks were insured against all losses even if their accounts exceeded the normal FDIC insurance limit and though not explicitly stated, it was widely understood that every depositor in the baking system would be similarly insured. Most importantly, liquidity spigots were opened for everyone at virtually any collateral and at cheap rates. Three programs were instrumental: The newly created emergency program, Bank Term Funding Program (BTFP), the Federal Home Loan Bank (FHLB), and the discount window. The discount window was only used in the early phase of the crisis, when banks rushed to borrow upwards of \$100 billion as the credit squeeze set in. But the BTFP and the FHLB carried the heavy lifting: the FHLB loans hit \$1 trillion at the height of the crisis last year and though that figure has come down a bit, it remains elevated at \$800 billion. Borrowing through the BTFP ballooned. Crucially, the banks could tap BTFP capital by using U.S. Treasuries at face value without having to sell them at depressed prices. For some Treasuries, this meant a premium of 35%-40% above market value, a huge help in mitigating potential losses.

So generous were the BTFP terms that banks were even able to benefit from an unexpected arbitrage opportunity: When expectations for short term rates fell due to anticipated rate cuts, borrowing from the program and parking funds as excess reserves with the Fed (which pays a higher rate) generated a windfall. Not surprisingly, BTFP borrowing sky-rocketed to \$160 billion early this year, not because of funding stress but due to the opportunity to earn a risk-free profit (Figure 6). The arbitrage profit has now disappeared: The Fed rushed to raise borrowing costs and the program was on its last day as of this writing.

FIGURE 6
Bank Borrowing Through the Emergency Lending Program Skyrocketed
(BTFP funding, billions of dollars)



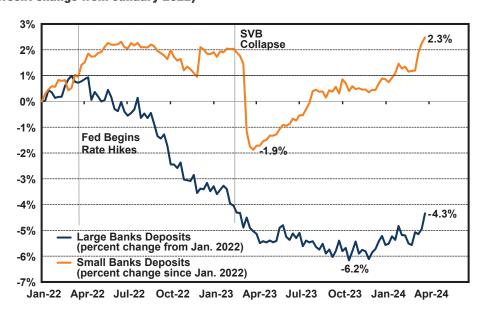
But despite its shortcomings, the lavish generosity paid off. The stampede of deposits from the banking sector halted. From March until May of last year, almost \$800 billion in deposits fled the banking sector. Since then, nearly \$300 billion has made its way back. Small banks have performed even better, having recovered the entirety of the \$200 billion in deposits lost in the early stages of the crisis. All told, bank

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deposits for small banks are now up 2.4% above January 2022 levels, before the Fed began hiking (Figure 7). Large bank deposits have shrunk but are now in better shape than mid-last year. And lower expected interest rates have also reduced unrealized losses on banks books: As of the fourth quarter of 2023 (latest available data), unrealized losses for the banking system were \$478 billion, \$206 billion less than the previous quarter and the lowest since Q2 2022. Though a full-blown banking crisis was never our baseline scenario, it is safe to say that much like Les Grossman, the studio mogul in *Tropic Thunder* who "likes to throw words around like crisis, explosion," words like "banking panic" or "financial crisis" — which appeared with uncomfortable frequency in the financial press last year — turned out to be "just words."

FIGURE 7
Bank Deposits Have Recovered
(percent change from January 2022)



In short, the U.S. economy has surprised to the upside, not just barely, but by a wide margin. Even the most optimistic projections never envisioned such outstanding performance. Worse, calls for recession— including our own— were widely off-mark and embarrassingly wrong. Which makes 2023 one of the most dreadful years in the history of forecasting, one that brought a great dose of humility to many, including us, your favorite economists. But we have always labored under the mantra that the business of forecasting is a humbling one, so when facts change, we adjust our assumptions, update our data, and revise our outlook. We are also the first ones to admit that, like Tug Speedman, *Tropic Thunder*'s Oscar winner for "the true story behind the making of the most expensive fake true story ever," the US economy deserves a standing ovation and its own Academy Award for a spectacular performance and enduring strength in the face of extraordinary *Tropic Thunder*-level challenges.

There are two main reasons why recession calls were so wildly inaccurate last year. The first reason has to do with a notoriously difficult factor to predict and the second is related to exceptionally (and almost unbelievably) large data revisions. Start with the hard-to-forecast factor: artificial intelligence (AI). The AI revolution has certainly goosed the stock market over the past year, with tech-heavy firms posting astronomical returns: The big four — Amazon, Meta, Microsoft, and Nvidia — are up 250% since January 2022. Nvidia, the chipmaker critical for training AI models, has seen its valuation shoot up from \$500 billion to \$1.7 trillion, making it America's fifth most valuable firm. But it's not just the big

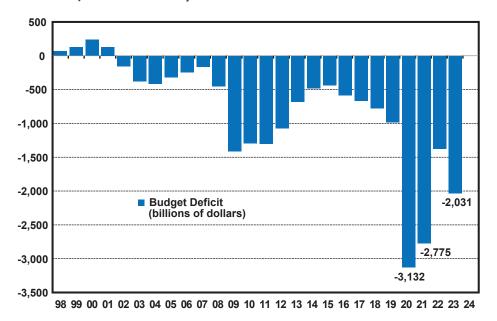
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companies: Thousands of smaller Al firms have popped up on the wings of the Al revolution. Anguilla, a small tranquil island in the Caribbean whose internet domain is ".ai" (reflecting its shorter suffix), now generates a third of its government revenues by licensing out the name of the domain. Techno-optimism bodes well for productivity gains in the future, but the Al boom was hard to predict in advance given that these types of technological innovations happen in discreet and unpredictable jumps.

The second reason why recession predictions were so misplaced has to do with exceptionally large and unprecedented data revision. Though these seem to be present in virtually every data statistic since the pandemic, two revisions stand out: fiscal deficits and excess savings. Early in 2023, the Congressional Budget Office reckoned that the fiscal deficit for the year would be \$1.4 trillion. That estimate was wildly off-mark as the final figure came at a much higher nearly \$2 trillion (Figure 8). The wider deficit was partially due to weaker tax returns (reflecting capital losses in equity markets in 2022) and partially from an outsized increase in spending: Government spending last year was the equivalent of 6.3% of GDP— the largest outside a war or a recession. And though budget revisions are hardly new, we are hard-pressed to come up with a previous example when the final tally and the original estimate were so far apart. That \$600 billion accounts almost entirely for the difference between a continued expansion and a mild recession.

FIGURE 8
The Main Reason for Resiliency: Still Lavish Fiscal Support (federal deficit, billions of dollars)

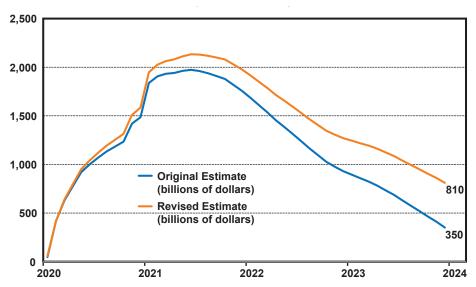


A second important data revision relates to excess savings. Towards the end of 2023, excess savings — the pile of cash related to the spending shortfall and outsized government support during the pandemic — stood at roughly \$500 billion. Around that time, the Bureau of Economic Analysis revised saving figures going back a decade, showing that excess savings were much higher than originally estimated, tallying to around \$1.1 trillion as of November 2023 (Figure 9). Notably, the revision was not due to consumers saving more since the pandemic, but rather due to them saving less prior to the pandemic. Since the baseline comparison pre-pandemic was now lower than originally thought, excess savings turned out to be much higher. But whatever the reason, an extra \$600 billion of cash "threw another shrimp on the barbie" (as Alpa Chino in *Tropic Thunder* would say), boosting consumer spending and helping greatly in staving off a recession.

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FIGURE 9 **Consumers Have More Excess Savings Than Previously Estimated** (billions of dollars)



Will America's remarkable strength persist? Will this outstanding performance have a sequel? The answer from the consensus seems to be a resounding yes. "Out of this nettle, danger, we pluck this flower, safety" — the immortal words of Henry Hotspur (Shakespeare, Henry IV) perhaps best reflect the prevailing view that the Fed has either already delivered or is on its way to achieve what not long ago was thought to be nearly impossible: quelch inflation, without quashing growth. Depending on who you ask, the delicate balance of bringing down inflation without a recession — the much elusive soft landing — is either here or about to happen. Never in the post-war era has inflation fallen from above 5% to 3% without a recession. Out of a dangerous nettle, a delicate flower has been plucked, or so the thinking goes.

The issue with this line of thought is twofold: First, even the cushiest soft-landing implies some growth downshift. Yet, the most striking feature of the American economy at the moment is not its deceleration but its continued strength. Just a couple of months ago, the consensus prediction for 2024 was for real GDP growth of 1%: those figures have since doubled. The second concern is that, as we have cautioned in the past, the complete story of this tightening cycle has yet to be written and the sequel yet to be performed, which means that soft landing declarations may prove premature. And though a recession is no longer our baseline scenario, it is worth remembering that the time lag from when the Fed starts raising rates to a recession has been as short as 10 months (in 1972) and as long as 42 months (in 2007). "I don't drop character 'till I done the DVD commentary," quips Kirk Lazarus — the 5-time Oscar winner method actor of Tropic Thunder. Much like Kirk, it appears that the DVD commentary for this rate hiking cycle has yet to be done.

Thus, our outlook for the economy is more nuanced than the consensus fare and decidedly more complex: rosier in the short term but murkier in the long run. In the short run (over the next 6-8 months), we are more upbeat than the consensus. We see a "no landing scenario" — continued growth which is more likely to accelerate than downshift—given the tailwinds propelling it: impending rate cuts, strong balance sheets, excess savings, fiscal support, and a buoyant stock market. But the outlook is more cautious longer term, not in the least because the very strength - and resiliency - of the U.S. economy coupled with expectations of rate cuts will likely sow the seeds of imbalances that may come to haunt us down the line. Crucially, instead of tampering down The most striking feature of the American economy at the moment is not its deceleration but its continued strength.

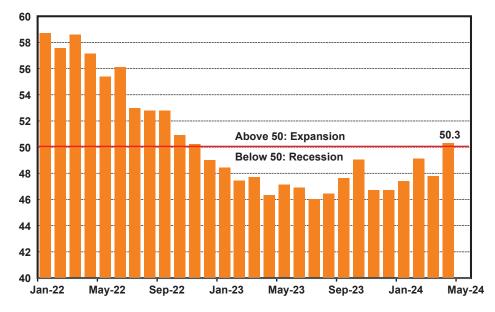
Our outlook for the economy is more nuanced than the consensus fare and decidedly more complex: rosier in the short term but murkier in the long run. In the short run (over the next 6-8 months), we are more upbeat than the consensus.

inflation pressures, stronger growth may inflame them back up, complicating the job of the Fed. This leaves two possibilities in the long-run: a recession or a stagflationary-like environment. Should inflation continue to remain sticky (which is our base case) and the Fed hesitate to deliver rate cuts (which is not our base case), the probability of a recession will remain uncomfortably high. The most likely scenario, in our view, is a stagflationary-like environment where growth slows (to below 2%) and inflation remains range-bound between 3%-4%. This is far from the full-blown stagflation a la 1970s, when growth stalled, unemployment rose, and inflation raged. Call it "stagflationary-lite," to distinguish it from the horrors of the 1970s.

Take the short term first. Soft-landing talks imply that growth has either downshifted or is about to. But it is hard to see this in the data. Sure, U.S. growth has come off the boil — it grew by 4.1% in the second half of 2023 - but is still solid. Consumer balance sheets are strong, at least on aggregate, with no glaring imbalances or over-the-top leverage. Household debt as a percentage of GDP has edged down from a high of 100% right before the financial crisis to a current 73%, the lowest in over two decades. Household financial obligations as percent of disposable income have inched higher from the record lows of the pandemic but are still below historical levels. Real consumption spending has grown at a healthy pace of 2.2% so far this year, the same figure it posted for the entirety of last year. Far from a slowdown, the labor market is heating up: Employment rolls swelled by an average of 275,000 jobs in the first guarter of this year, outpacing the 212,000 jobs posted in the last guarter of 2023. Judging by the low level of initial claims, a leading indicator, the strength of the labor market, appears to have some staying power. Even manufacturing, which suffered a mini recession over the past two years, seems to have turned a corner: In March, the PMI index broke above 50 (the demarcation between a recession and expansion) for the first time since November 2022 (Figure 10).

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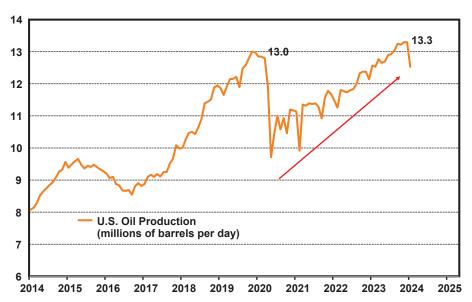
FIGURE 10 Manufacturing is Turning a Corner After 16 Months in Recession (PMI Index, level)



In many ways, the factors that helped America dodge a recession and thrive over the past two years are still in place to varying degrees. Consumers and businesses locked rock-bottom interest rates during the pandemic which are fixed for a relatively long time. The roughly \$800 billion in current excess savings, though a third of the original stockpile, is enough to last at least for the remainder of the year. Production of oil and gas, which has ramped up dramatically over the past year has helped America benefit from high energy prices without suffering too much itself: natural gas costs four times more in Europe, for example (Figure 11). The U.S. became the world's biggest exporter of liquified gas (LNG) last year with international trade adding 0.6 percentage points to real GDP. And government spending will continue to prop up growth as the bulk of three spending bills passed by Congress — the bipartisan infrastructure bill (\$1 trillion), the Inflation Reduction Act (\$1.2 trillion), and the CHIPS Act (\$280 billion) — has yet to be disbursed. Public infrastructure construction rose from \$350 billion in mid-2022 to \$450 billion in February of this year. More is on the way.

The factors that helped America dodge a recession and thrive over the past two years are still in place to varying degrees.

FIGURE 11 **U.S. Oil Production Through the Roof** (millions of barrels per day)



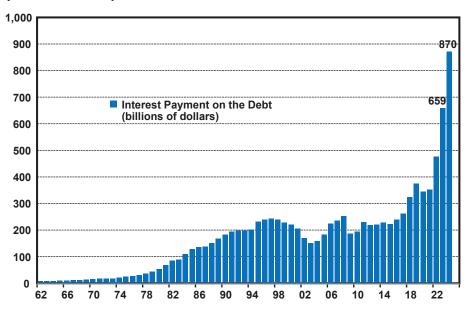
But by far, the biggest tailwind for the economy is the "Fed pivot" — the abrupt and rather astounding change in the stance of monetary policy from "higher for longer" to "imminent rate cuts." This is truly a game-changer, in our view. Since December of last year when the pivot was first announced, the Fed has maintained an outlook for three 25-basis points cut in 2023. This has sent the stock market into euphoria: The broader S&P500 is up 13.5% over the past three months, setting record highs seemingly every week. Even the more challenged Russell 2000 index, which represents smaller firms, has posted a respectable 11.7% during this period. Financial conditions have eased considerably: Corporate bond spreads have narrowed significantly as has the spread between highyield (below-investment-grade) corporate bonds and 10-year Treasuries.

All these factors underpin a strong economy, one that not only still has legs and room to run but that is more likely to accelerate rather than downshift in the short-term. Indeed, the real wonder is the need (and wisdom) for rate cuts in the first place. With accelerating growth and loose financial conditions, the appropriate stance for monetary policy would be to keep rates at current levels

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The real wonder is the need (and wisdom) for rate cuts in the first place. until the battle against inflation is more convincingly (and permanently) won. But given that rate cut expectations are so embedded in investors' psyche — early on, they expected as many as six, as early as March — we think the Fed has cornered itself into carrying out at least some of its promise. Besides, the ballooning interest on the national debt — which is projected to hit an all-time high of \$870 billion in 2024 — is simply unsustainable if interest rates remain high for much longer (Figure 12). Our view is that the Fed will be able to deliver two instead of three rate cuts, both of them likely coming after the election. The election calendar further complicates the monetary cycle by putting the Fed in the middle of a hotly contested election season, something it will try hard to avoid.

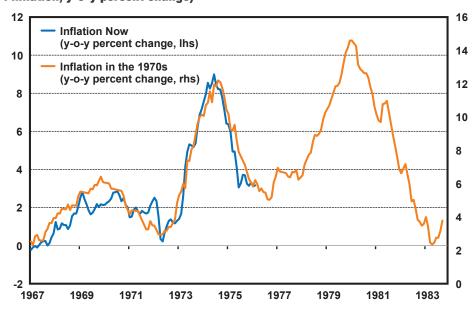
FIGURE 12 **Interest Payment on the National Debt Has Ballooned** (billions of dollars)



Impending rate cuts and a strong economy may be just the catalyst to reignite a fresh new bout of inflation. Signs are already emerging: Since June 2023, even before the Fed pivot, headline inflation has remained range-bound — between 3% and 4%. Worse, the past two months have shown clear signs of an uptick: CPI rose by a higher-than-expected 0.3% in January and an even higher 0.4% in February. Core inflation is also heating up again; While the 12-month rate currently stands at 3.8%, core inflation is up 4.2% on a 3-month annualized basis and 4.4% on a one-month (annualized) basis. This is precisely the wrong trend, and it is unfolding exactly as we cautioned: Inflation will prove to be stickier, more stubborn, and harder to tame than most expect. In the mid-1970s, a second, more harrowing, and more persistent wave of inflation (from 1978-1983) followed the first one (from 1971-1975) (Figure 13).

Impending rate cuts and a strong economy may be just the catalyst to reignite a fresh new bout of inflation.

FIGURE 13 **Inflation Now and Then** (CPI inflation, y-o-y percent change)



A repeat of that episode is unlikely, and we do not expect inflation to spiral out of control as it did in 2022, but the U.S. is about to enter a new phase where rapid disinflation is replaced by a slower slog downward, punctuated by small periodic trend reversals. To the surprise of everyone (especially the Fed), the economy will likely contend with higher-for-longer inflation, not interest rates.

Inflation stickiness is not just a demand story spawned by a strong economy. In fact, the most concerning inflationary pressures are supply-side related. The boost from the untangling of the supply chains has already occurred: Once untangled, supply chains cannot become even more so. In fact, the opposite is occurring as the crisis in the Red Sea and the drought in the Panama Canal are complicating deliveries and increasing shipping rates. The collapse of the Francis Scott Key Bridge in Baltimore will add further pressures to already fraying supply lines. Geopolitical risks are at the highest in over three decades: Should tensions escalate, oil prices will rise. Supply chains are being redesigned with an eye toward resiliency rather than efficiency, which is likely to put additional upward pressure on inflation. The rapid rise in labor force participation in America, which has taken some pressure off the labor market appears to have stalled and reversed: After rising from 60% in 2020 to nearly 63% in August 2023, the participation rate has fallen to 62.5% over the past few months. The green energy transition being orchestrated across advanced economies will also add additional strains to inflation for some time to come.

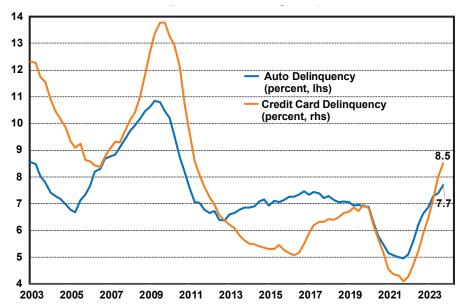
Half of the stagflationary-lite environment is sticky inflation; the other half is slower growth — below the economy's potential of 2%. This is harder to spot given that the U.S. economy is currently sailing full steam ahead. But beyond the immediate setting, signs of strain are emerging. Household wealth is up an eye-popping \$37 trillion above 2019 levels, but in real terms, after accounting for the surge in inflation over the past two years, it is below the pre-pandemic trend — by a full 5%. Consumers are relying significantly more on credit card debt than in the past: credit card usage exceeded \$1 trillion in the summer of 2023 and has stayed elevated ever since. The cost of borrowing has also

shot up: The average interest rate on credit card debt is a harrowing 21.5% — the highest in over three decades. Consumers are also having a harder time paying down debt: At the end of 2021, 39% of credit card holders carried debt from month to month: that jumped to 47% in 2023. Defaults are on the rise with auto loan delinquencies reaching their highest level since the Great Recession (Figure 14). Corporate bankruptcies are also on the rise: Last year, they reached the highest level since 2011, when the U.S. economy had just begun to escape the clutches of the Great Recession. The roughly \$800 billion of excess savings will likely be depleted by the end of the year, placing additional strains on consumption.

The U.S. is about to enter a new phase where rapid disinflation is replaced by a slower slog downward. punctuated by small periodic trend reversals.

Inflation stickiness is not just a demand story spawned by a strong economy. In fact, the most concerning inflationary pressures are supply-side related.

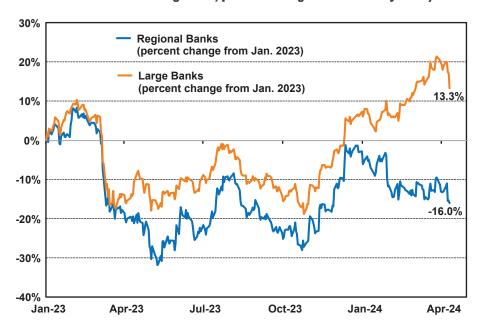
FIGURE 14 **Cracks are Appearing: Consumer Delinquencies on the Rise** (percent of outstanding loans)



Federal spending on infrastructure projects will boost growth, but some of the oomph may be sapped by sagging revenues at the state and local level. The budgeting environment for states and local governments is dramatically different now compared to a year ago, with tax revenues plateauing or even declining in many states. Ever the poster child for the extremes, California's state budget has swung from a \$100 billion surplus to a projected \$73 billion shortfall in the span of two years. State and local government spending fell 1% in January of this year, the first monthly decline since August 2022.

Troubles in the banking system will not morph into a full-blown financial crisis, but some scars remain. A full three-quarters of regional banks' valuations are lower now compared to pre-crisis. Small banks are faring worse than large ones (Figure 15). Ever more cautious, banks have become more reluctant to lend: Loan volumes grew by a paltry 2.3% in 2023, far below the 11.2% pace seen in 2022. Troubles in the commercial real estate (CRE) sector have yet to filter through: Small banks are particularly vulnerable because they have 4.4 times more exposure to the CRE market than large banks. And the CRE market is bracing for a record amount of maturing loans—roughly \$2.7 trillion between now and end-2027—which will need to be refinanced at higher rates.

FIGURE 15 Bank Valuations Are Diverging: Small Banks in Worse Shape Than Large Banks (KBW index and S&P 500 Banking index, percent change since January 2023)

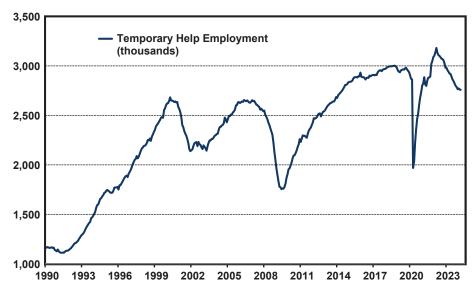


The once unassailable labor market is also showing some signs of fatigue. The breadth of job formation has narrowed ominously, with a disproportionately large number of new jobs coming from just two sectors; health care and government. This does not bode well for the economy going forward: Historically the breadth of the labor market tends to narrow before the economy shifts to a lower gear. Other leading indicators also point to some softening: The guits rate — the rate at which workers quit existing jobs and a reliable measure of labor market confidence— is now back to pre-pandemic levels after remaining elevated for over two years. Temporary help employment has declined for fifteen straight months and part time employment for economic reasons has edged up (Figure 16). Historically, a drop in temporary help and an increase in part time employment are harbingers of recessions. Our view is that these trends likely reflect distortions related to the pandemic and post-pandemic recovery rather than a recession this time around, but even so, some weakness in the labor market has begun to set in.

Federal spending on infrastructure projects will boost growth, but some of the oomph may be sapped by sagging revenues at the state and local level.

Troubles in the banking system will not morph into a full-blown financial crisis, but some scars remain.

FIGURE 16 A Harbinger of Doom: Temp Help Services Have Declined Signaling a Slowdown (thousands of workers)



The performance of the U.S. economy over the past year is nothing short of miraculous. This inspired us to name our forecast "Stairway to Heaven," after one of the most iconic rock ballads in history because only a phenomenal piece of songwriting and fantastical lyrics can aptly play tribute to this performance. But pay close attention to the lyrics and a more complex and mystical meaning emerges: "There's a lady who's sure all that glitters is gold, and she's buying the stairway to Heaven." The American economy is glittering, adorned by heaps of government support and excess savings which themselves were propped up by previously lavish fiscal largesse. The question is, have we overpaid for our stairway to Heaven?

The American economy is glittering, adorned by heaps of government support and excess savings which themselves were propped up by previously lavish fiscal largesse. The question is, have we overpaid for our stairway to Heaven?

Welcome to the (Tropic Thunder) Jungle: Crawling Through the "Last Inflation Mile"

"I don't read the script. The script reads me."

- Kirk Lazarus, Tropic Thunder

U.S. inflation has stuck relatively close to script over the past two years: After setting a four-decadeshigh of 9.1% in June 2022, headline inflation plunged to 3.1% one year later and has remained rangebound ever since, fluctuating between 3.1% and 3.7%. The drop mirrors almost exactly a similar decline five decades ago when inflation fell from a vertiginous 12.2% at the end of 1974 to around 5% in early 1976. The price index of personal consumption expenditures (PCE) —the Fed's preferred measure of inflation— has also fallen from 7.1% to a current 2.5%, also matching the speed and depth of the decline five decades ago. So far, so good. So far, according to the script.

Kind of. Take a peek underneath the numbers and worrying trends emerge. On a year-over-year basis, CPI inflation rose from 3.1% in January to 3.2% in February. Ditto for PCE inflation which went from 2.4% to 2.5%. But since month-to-month fluctuation can be easily dismissed as data vagaries, perhaps comparisons on a three-month basis may prove more informative as they more directly uncover recent underlying trends. From this perspective, things look even more worrisome: On a three-month annualized basis, CPI numbers have trended up, from 1.9% in December 2023 to 3.9% in February of this year. PCE figures are even more troubling, showing a jump to 3.3%

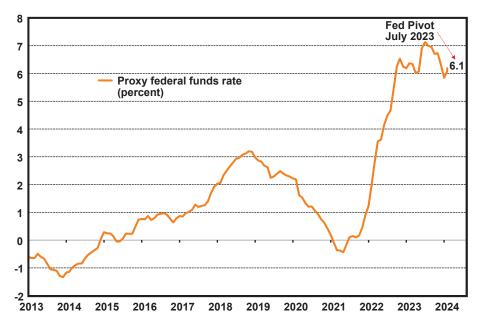
On a three-month annualized basis, CPI numbers have trended up, from 1.9% in December **2023 to 3.9% in February** of this year.

compared to the tame pace in December, when the three-month annualized rate was a much cooler 0.6%. The uptrend for core prices appears to have started way earlier: on a three-month annualized basis, core CPI is running at a brisk 4.2% pace, a third higher than the 2.6% rate posted in the summer of last year. Core PCE has shot up from a three-month annualized pace of 1.6% last summer, to a current 3.5%.

The stall—and potential reversal—of disinflation appears to coincide with a curious time in the stance of monetary policy: July of last year marked what appears to be the Fed's last hike for this cycle. Indeed, while the Fed's pivot to rate cuts in December has been the true headline-grabber, the Fed's dovish turn began earlier, in July of last year. The San Francisco Fed Proxy funds rate - a broader indicator of monetary policy which accounts not just for the policy rate but also for balance sheet operations, forward guidance, and financial conditions - has edged down by 100 basis points since July 2023, from a high of 7.1% to 6.1% (Figure 17).

The stall— and potential reversal — of disinflation appears to coincide with a curious time in the stance of monetary policy: July of last year marked what appears to be the Fed's last hike for this cycle.

FIGURE 17 The Fed Pivot Happened Last Summer (proxy federal funds rate, percent)



It is not hard to see how easy monetary policy may stoke the very flames of inflationary pressures that the Fed has been trying to tamper over the past two years. And history may offer some guidance: twice in the post-war era when inflation got out of hand— in the late 1940s and mid-1970s — it did so in two successive waves. The script is virtually identical in both cases: A surge in inflation prompts the Fed to raise interest rates; inflation predictably falls, the Fed eases as the economy enters a recession and inflation soars again.

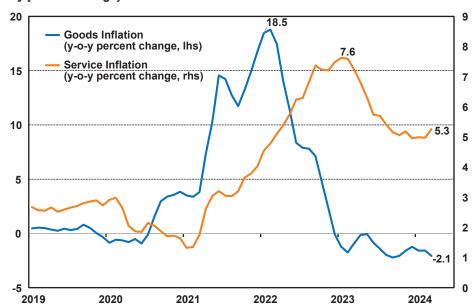
The Fed does not appear to be overly concerned about a possible flare-up in inflation. "We expect inflation to move down to 2%—but on a path that is sometimes bumpy," mused Jerome Powell, the Fed Chairman, recently. "The question is, are those just bumps or are they something more than bumps? We're just going to have to let the data tell us that." It seems the Fed has already made up its mind: It is still penciling in three rate cuts this year, which means it has already discarded the current inflation stickiness as mere "bumps on the road."

Twice in the post-war era when inflation got out of hand— in the late 1940s and mid-1970s — it did so in two successive waves.

We disagree. Though we do not think a second mountain of inflation is about to break out, as we have argued for some time in these pages, the last "inflation mile" will be a crawl rather than a gallop. That's because of two main factors: structural stickiness and the ebbing of earlier tailwinds. The sticky part relates to service inflation, which was always going to be challenging since services tend to be less interest-rate sensitive. Indeed, after dropping from a high of 7.7% annualized pace, service inflation has changed little since September of last year, remaining stubbornly flat at 5%. In contrast, prices of goods which soared to above 18% in early 2022, have declined for 17 straight months (Figure 18). This means that while services have experienced modest disinflation during this tightening cycle, goods have posted real genuine deflation.

Though we do not think a second mountain of inflation is about to break out, as we have argued for some time in these pages, the last "inflation mile" will be a crawl rather than a gallop.

FIGURE 18 The Drop in Inflation is Primarily a Goods Story (y-o-y percent change)



In fact, last year's disinflation is primarily a goods (and energy) deflation story. As supply chains untangled, shipping costs fell from a dizzying \$10,000 for a forty-foot container, to a historical average of below \$2,000. Prices of goods fell worldwide, dragging down inflation rates. Of the nearly six percentage point decline in inflation since the summer of 2022, goods have accounted for five points of the drop. Improvements are everywhere: Used vehicle prices have fallen by 11%, after skyrocketing at an annualized pace of 41% early in 2022. Lumber prices have normalized after doubling in 2021. Energy prices rose by over 40% early in 2022 at the onset of the Russia/Ukraine war, but they have fallen by 14% since then as energy and commodity lines reorganized, reoriented, and normalized.

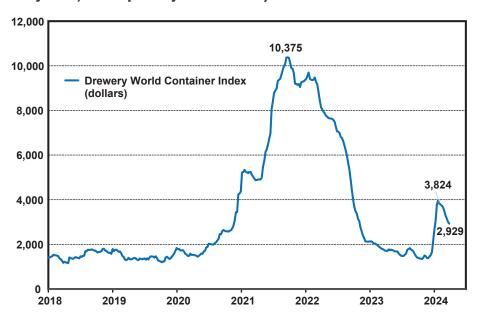
The trouble is that these tailwinds have started to ebb. Worse, in some cases, they are reversing. Supply chains appear to be gumming up again, at least in some corners of the world. Since late last year, the world has had to contend with disruptions at two of the world's crucial trade corridors - the Panama Canal and the Suez Canal - which in normal times carry around 5% and 10% of maritime global trade, respectively. An historic drought has forced restrictions at the Panama Canal, while shipping operators are facing continued challenges in the Red Sea as Houthi rebels have escalated attacks on commercial ships. As of this writing, overall traffic through the Panama Canal is down 30%, while the decline through the Suez Canal is a more staggering 55%. The shocking collapse of Baltimore's Key Bridge will scramble supply lines, especially vehicle transportation, as

Supply chains appear to be gumming up again, at least in some corners of the world.

the port of Baltimore is the nation's top port for vehicle transport, handling nearly 850,000 cars and light trucks in 2023. The recent Taiwan earthquake, the largest in nearly 25 years, will likely cause a disruption of supply chains for semiconductors and other tech-related items, at least temporarily.

None of this means that the world is headed for another bout of supply chain bottlenecks similar to the post-pandemic snarls that prevailed in 2021 and in early 2022. But it does add strain to fragile supply lines and reverses some of the disinflationary gains which were a direct result of supply chain normalizations. The Drewery World Container Index (WCI) jumped by 300% from October of last year to February 2024, when the price of a forty-foot container rose from \$1,300 to \$3,900 (Figure 19). And even though some of these costs have unwound lately, the index is currently settled at \$2,900, more than double the rate that prevailed throughout last year. Core goods inflation is on an upswing again: On a three-month annualized basis, it is currently running at 2.9%, up from 1.4% in December 2023.

FIGURE 19 Shipping Costs Have Edged Up Again (Drewery index, dollars per forty-foot container)



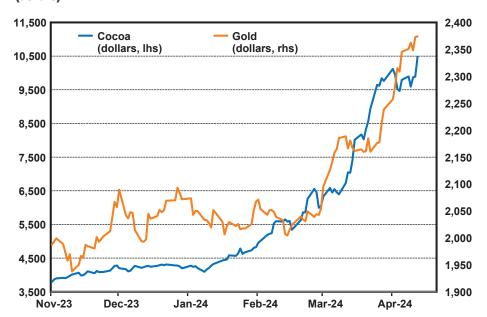
Oil prices are on a march again, rising to a five-month high after OPEC confirmed it would maintain its production quotas through the end of June. Shipping disruptions, rising geopolitical risks in the Middle East, and Ukrainian attacks on Russian refineries have placed additional pressure. As of this writing, Brent crude oil futures have settled at just a hair below \$91 per barrel, up 17.6% since the start of the year. Gas prices have inched up: The national average for a gallon of gasoline is up 12% for the year. Gas prices in California, always higher than the national average, have jumped to \$5 per gallon, up from \$4.50 at the start of the year. Fuel costs in the CPI index are currently up 1.4% compared to year-ago values, the first increase (on a year-over-year basis) in over 8 months. On a three-month annualized basis, fuel costs have been rising since last August.

None of this means that the world is headed for another bout of supply chain bottlenecks similar to the post-pandemic snarls that prevailed in 2021 and in early 2022. But it does add strain to fragile supply lines and reverses some of the disinflationary gains which were a direct result of supply chain normalizations.

Commodity prices - which were quite well-behaved last year after the surge in 2022 when the Russia-Ukraine war broke out, are on an upswing again. The CRB Thompson Reuters Commodity Price Index has risen by 14% over the first three months of the year. Copper prices have popped by nearly 20% since the cycle lows in October 2023 on expectations of stronger global growth and healthier demand due to impending rate cuts. Silver reached a 52-week high. Gold is altogether another story. "You can fondle the cube, but it will not respond," Warren Buffet is reportedly known to have quipped when highlighting gold's poor performance over time compared to stocks. No longer: It appears that the inert cube is showing signs of life, surging to about 2,300 per ounce, an increase of 11% so far this year and 26% since October (Figure 20). Maybe "all that glitters is gold," after all.

Commodity prices which were guite wellbehaved last year after the surge in 2022 when the Russia-Ukraine war broke out, are on an upswing again.

FIGURE 20 **Through the Roof: Commodity Prices Have Taken Off** (dollars)



But the top prize for a true outbreak goes to cocoa prices, which have doubled since mid-2022. Cocoa futures topped \$10,000 per metric ton at the end of March, in part because of unfavorable weather in West Africa which produces around 60% of the world's crop. This made for a less joyous Easter, with pricier chocolate Easter bunnies and dearer eggs (the price of a dozen eggs was \$3 in March, up from \$2 in the fall). Some candy-makers have gotten creative: Mars has shrunk the size of some of its chocolate bars; Hershey launched a Kit Kat that's only partially dipped in chocolate. "It's called shrinkflation," Mr. Biden explained in his State of the Union address, "You pay the same amount, but you get about 10% fewer Snickers in it." Whatever the name, the start of the year has been tough on chocoholics. Perhaps we should come up with a Snickers bar index.

All this means that the tailwinds of last year's disinflation — an outright drop in the price of goods, energy, and commodities — have either stalled or reversed. This does not bode well for inflation outlook. And we have not even begun to account for the sticky part: service inflation. This is slowing at a much more gingerly pace precisely because services tend to be less interest-rate sensitive. The sticky price index developed by the Atlanta Fed, which captures the items in CPI that change prices less frequently (medical care, rents, personal care, etc.) has hovered at around 4.5% All this means that the tailwinds of last vear's disinflation — an outright drop in the price of goods, energy, and commodities — have either stalled or reversed. annualized pace over the past three months, after dropping precipitously last year. But it's not just slow progress: Recent trends show an unwanted reacceleration in service inflation: On a three-month annualized basis, service prices have risen from a 3.5% pace in May 2023 to a current 6.2% (Figure 21). As we have argued in the past, this will make the last bit of inflation annoyingly difficult to bring to heel.

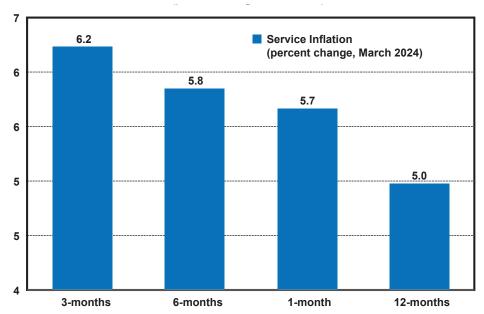
On the face of it, this should not be such a hard lift and such a slow grind. Housing, which accounts for nearly one third of CPI inflation (and a smaller 15% for PCE), is extremely sensitive to interest rates. In normal times. But these are not normal times: After an initial decline, home prices as measured by the Case-Shiller National Price Index,

have set record highs, increasing by 6% since January 2023. That's because there's a dearth of homes for sale as most borrowers locked in low mortgage rates during the pandemic. This has not only put a floor on home prices but has helped propel them higher.

Housing, of course, does not show up in inflation statistics directly as the Bureau of Labor Statistics (BLS) considers it, rightfully, an investment good. But housing constitutes a large part of personal budgets, so any proper measure of inflation must account for it. Instead of measuring property prices outright, inflation indices factor in how much people pay for rent—or would receive in rent if they leased their own homes. The latter is known as owners' equivalent rent (OER). Since two thirds of Americans own their homes (with the other third renting), OER weighs more in inflation statistics than rents.

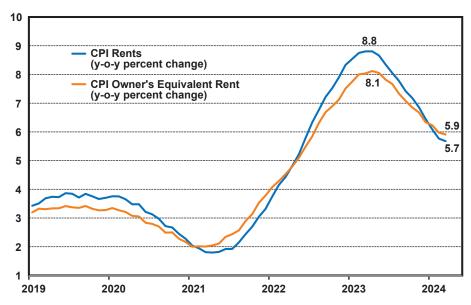
This matters. The CPI rent component has eased faster over the past year than OER, dropping from a forty-year high of 8.8% to a current 5.7% (Figure 22). OER has also decelerated but by lessfrom 8.1% to 5.9% (both are still above historical averages of around 2.6%-3%). There are reasons for this: Rent growth has normalized around its long-run average of 3.5% as of February (latest available data) after jumping by as much as 17% in 2022. This trend should continue. Construction of multifamily residential units has increased dramatically over the past two years with around one million sq ft to be completed over the next few months. The surge in new units will significantly increase supply, placing downward pressure on rents in the coming year. It takes a while for rent moderation to fully show up in inflation statistics, but it will ultimately appear. OER, on the other hand, will prove stickier. Detached single-family homes for rent (on which OER is mostly based) are scarce, which means single-family rents will continue to outpace multifamily rents for a while longer, adding to inflationary pressures.

FIGURE 21 Service Inflation is Reaccelarating: Recent Trends Higher than Year-ago Figures (percent change, annualized)



After an initial decline, home prices as measured by the Case-Shiller **National Price Index,** have set record highs, increasing by 6% since January 2023. That's because there's a dearth of homes for sale as most borrowers locked in low mortgage rates during the pandemic.

FIGURE 22 Sticky Shelter Costs Are Complicating the Inflation Picture (y-o-y percent change)



It isn't just housing that is proving sticky: Supercore service inflation, which strips away housing and is based on things like medical care services, insurance, education, etc., has ticked up again, from 3.7% (annualized basis) in October to a current 4.3%. The trend is worse on a three-month annualized basis: Supercore inflation has heated up from a cool 2% last summer to a current 6.7%.

The culprit for sticky supercore is wage growth. Wage pressures have begun to ease, but progress has been agonizingly slow. Worse, the deceleration appears to have stalled over the past few months. The Atlanta Fed Wage Tracker Index has moderated to 5.0% over the past few months from a high of 6.7% recorded last year, but it is still above the historical average of around 3.4%. The BLS Employment Cost index, is running at a 4.2% annualized pace, down from a high of 5.1% recorded in 2022. It would have to decrease to about 3.5% to be consistent with the Fed's 2% target. To account for the degree of wage persistence (or stickiness), the New York Fed recently constructed a measure of trend wage inflation. After falling from nearly 7% in 2022 to around 5% last year, progress has stalled. In fact, trend wage growth has risen a bit since last summer: from 4.8% to a current 5%. This increase is small enough to be barely perceptible, but it does point to a hint of trend reversal in the data.

To be sure, the labor market has moved in the right direction, towards easing wage pressures, even though more work remains to be done. Labor demand, as reflected by job openings, has moderated from a high of over 12 million when the Fed began raising rates, to 8.7 million. Encouragingly, the quits rate — the rate at which people leave their jobs (usually for better positions) and a great predictor of wage pressure — is currently back at pre-pandemic levels, after remaining elevated for nearly two years. Labor supply has also cooperated: From March 2022 (when the Fed started raising rates) until August of last year, the labor force swelled by 4.4 million workers, tempering wage growth and easing inflationary pressures. Higher wages may even be consistent with a 2% inflation target should recent productivity gains continue.

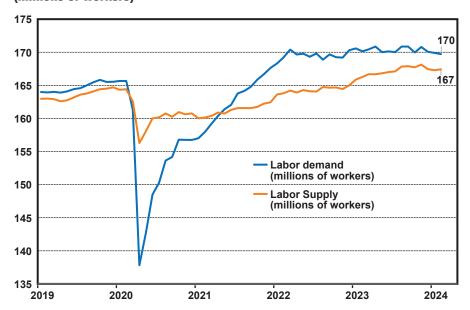
The problem is that progress in some of these factors appears to have stalled. Productivity gains are unlikely to continue at the current high pace since they reflect the untangling of production lines from the pandemic rather than the much-anticipated jolt from AI (which will materialize down the line).

Wage pressures have begun to ease, but progress has been agonizingly slow. Worse, the deceleration appears to have stalled over the past few months.

The labor force has risen by a mere 55,000 over the past six months. The participation rate has actually fallen over the past few months and currently stands 0.1% points below last summer's values. Labor demand (the sum of employed workers and job openings) is still around 2.3 million above labor supply (as captured by the labor force) (Figure 23). This is far better than the over 7 million shortfall recorded in early 2022, but if demand continues to persistently outstrip supply, wage growth will take a while to normalize.

All this points to an inflation rate that is frustratingly stickier and more stubborn than what the markets and the Fed envision. Should the Fed cut rates this year, as we expect and as it is committed to do, inflation will prove even harder to tame. Though a second wave is unlikely

FIGURE 23 **Labor Market Has Normalized But Demand Still Outpaces Supply** (millions of workers)



to break out, rate cuts may reverse some of the progress so far, with inflation remaining sticky at a 3%-4% range. "My sense is that the Fed has itchy fingers to start cutting rates and I don't fully get it," Lawrence Summers, a former U.S. Treasury secretary, said recently. Itchy fingers, indeed.

Labor demand (the sum of employed workers and job openings) is still around 2.3 million above labor supply (as captured by the labor force).

The Thunder of the Tropic: From Strong Growth to Moderate Stagflation

"Same thing happened to me when I played Neil Armstrong in Moonshot. They found me in an alley in Burbank trying to re-enter the earth's atmosphere in an old refrigerator box."

- Kirk Lazarus, Tropic Thunder

Spare a thought (and a prayer) for economists. Their recession calls last year proved as absurd as Kirk Lazarus's efforts to "re-enter the earth's atmosphere in an old refrigerator box." But unlike Kirk Lazarus- whose commitment to the craft, though ridiculously over the top, has earned him multiple awards— no nominations or awards will be handed out for economist, not even the Beijing film festival Crying Monkey Award. "Science advances one funeral at a time," the great physicist, Max Planck, once famously quipped, referring to the notion that new ideas take hold only once the supporters of older ones are gone. Perhaps the same can be said for the dismal science: Economics advances one wrong recession call at a time as old assumptions and models are discarded and new ones developed.

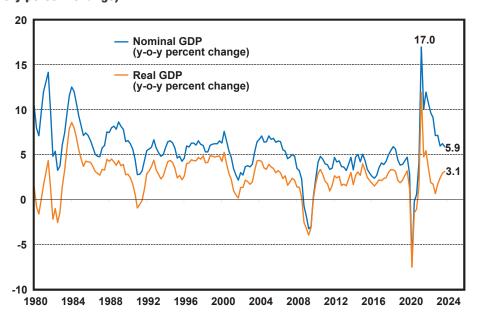
The U.S. economy has, at every turn, continued to defy the gloomier prediction of the dismal science and its disciples. Growth in the second half of last year averaged an eye-popping 4.1%, far above the economy's potential which is pegged at around 1.8%. The labor market added a total of 3 million jobs in 2023, double the pace that is consistent with demographics. Since expectations of rate cuts set in, the stock market has soared by 26%. Financial conditions have eased considerably: The spread between the BAA bond yields and Treasury rates is the lowest since the Fed began its rate hiking cycle. Every financial stress index (the Chicago Fed's, the Kansas City Fed's, the St. Louis Fed's, and Bloomberg's) points to a significant easing compared to just a few months ago.

The strong performance of the U.S. economy is not only at odds with economists' predictions but also with historically reliable recession indicators, such as an inverted yield curve and the Conference Board Leading Indicator Index (LEI). This merits some attention. The first has correctly predicted all post-war recessions, giving only one false signal (in 1966), while the second has correctly predicted all recessions with no false signals. The slope of the yield curve is one of the 10 indicators in the LEI index, but it commands an outsized weight precisely because of its historical accuracy at correctly predicting recessions.

The yield curve (and the LEI) has been ringing alarm bells for nearly two years, yet no recession has materialized. This means that a wider set of possibilities exists, where yield curve inversions do not necessarily imply a slide into a recession. Indeed, the signals from the yield curve are more consistent with the outlook for nominal GDP, which includes two components: real GDP and inflation. In the post-war era of relatively stable inflation, an inverted yield curve (which indicates falling nominal GDP) was more likely to reflect falling real GDP (rather than a decline in inflation), thus accurately predicting a recession.

However, things are a bit different in this cycle. An inverted real curve accurately predicted the drop in nominal GDP: from an annualized pace of over 17% in 2022 down to a current 5.8% (Figure 24). However, this occurred primarily through a precipitous decline in inflation rather than real GDP, which is how the U.S. economy deftly avoided a recession last year. More importantly, nominal GDP growth was so far above trend this time around — the highest in the postwar era thanks to lavish fiscal support during the pandemic— that there was enough room for it to fall by nearly two thirds without causing a recession.

FIGURE 24 Yield Curve Inversion Is Signaling a Decline in Nominal GDP, not Real GDP (y-o-y percent change)



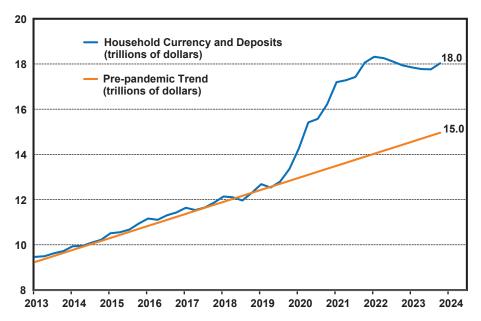
The (almost) infallible predictive power of the yield curve (and LEI) is one reason why economists were so mistaken in their recession calls. But to be fair to the economists, they did not get everything wrong. Bits and pieces of their predictions did materialize, just not in the way they (and us) envisioned. The economy did stumble - just not in the usual, all-encompassing, economywide full-blown recession — but rather by experiencing a series of multiple rolling mini-recessions which engulfed different sectors at different times. Early in the tightening cycle, the housing and tech The strong performance of the U.S. economy is not only at odds with economists' predictions but also with historically reliable recession indicators, such as an inverted yield curve and the Conference Board **Leading Indicator** Index (LEI).

An inverted real curve accurately predicted the drop in nominal GDP: from an annualized pace of over 17% in 2022 down to a current 5.8%. However, this occurred primarily through a precipitous decline in inflation rather than real GDP, which is how the U.S. economy deftly avoided a recession last year.

The economy did stumble - just not in the usual, all-encompassing, economy-wide fullblown recession — but rather by experiencing a series of multiple rolling mini-recessions which engulfed different sectors at different times. sector— two of the most rate-sensitive industries — slumped. From June 2022 until January 2023, home prices fell by a total of 2.3%, before reversing trend and rising to all-time highs. The tech sector lost an estimated 0.5 million jobs (mostly in California), most of which have not been recovered. Then, international trade sagged: U.S. exports fell by 1.8% last year, a first decline outside of a recession or trade war. The manufacturing sector followed, with the ISM index staying in recession territory for over a year. In March 2023, the banking sector wobbled. According to conventional wisdom, the commercial real estate market may be the next shoe to drop.

Nonetheless, despite these rolling waves, the economy has sailed ahead. There are reasons why the U.S. economy has proved so remarkably resilient. Start with the most obvious of all: pre-pandemic fundamentals. At the onset of the pandemic, consumer balance sheets were in great shape. Consumer debt as a percent of GDP had fallen to a historical average after the binge in 2005-2007, and debt loans were at historically low levels. COVID did not alter this picture; in fact, it made consumer buffers even stronger. Lavish government support to the tune of \$6 trillion propped up bank deposits and fattened consumer coffers (Figure 25). At their height, consumer excess savings are estimated to have reached \$2.5 trillion. The outsized government support during the pandemic stood out: The fiscal deficit in 2020 and 2021 averaged 14% of GDP, far higher than the 6% of the euro area.

FIGURE 25 **Household Deposits Still Above Trend** (trillions of dollars)



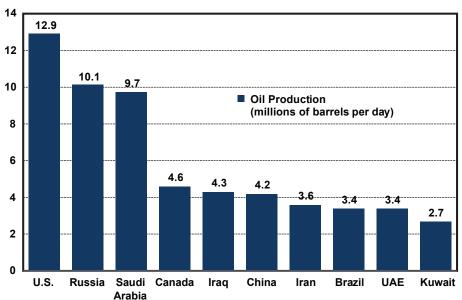
Fiscal support continues even as the economy outperforms expectations. After narrowing to about 5.3% in 2022, the fiscal deficit rose to 6.1% of GDP last year, a level typically seen only during wars or recessions. Some of this was due to weaker tax returns in 2022 as the stock market, particularly the tech sector, was hit hard. But most of this is attributed to lavish government spending on industrial policy ranging from green energy subsidies and investments to chip manufacturing, EVs, etc. Government spending accounted for nearly one third of real GDP growth last year, as three successive bills — the Bipartisan Infrastructure Act, the Inflation Reduction Act (IRA), and the CHIPS Act — continued to bolster the economy. As expected, investment in non-residential structures rose by a staggering 13% in 2023. Real spending in manufacturing rocketed by 60% on a year-over-year basis.

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Another reason why interest rate hikes have not derailed the economy is fixed-rate lending. Households and businesses took advantage of rock-bottom interest rates during the pandemic to shore up their finances and obtain loans at low-fixed rates with long maturity. 76% of debt S&P500 companies is currently fixed, compared to only 50% in 2007. Most of this debt, especially for high quality borrowers, is locked in at low rates maturing further out in the future than any time this century. The same is true for homeowners. Currently, 60% of 30-year fixed-rate mortgages are below 4%, and nearly 80% are below 5%. This has some drawbacks: Housing inventory is low, as most people prefer to stay put rather than take out a higher mortgage rate. But it does mean that the U.S. economy has been fortuitously well insulated from the shock of higher rates during this hiking cycle compared to previous episodes.

Supply-side developments have also helped. The U.S. has become a big producer and exporter of energy, which has helped it benefit from higher prices without suffering too much (Figure 26). Last year, the U.S. became the largest LNG exporter in the world, exporting over \$150 billion of energy exports to both Europe and Asia. For the first time in a decade, trade contributed positively to economic activity in 2023, adding 0.6 percentage points to real GDP growth in large part due to energy exports.

FIGURE 26 The U.S. is Now the Largest Oil Producer in the World (millions of barrels per day)



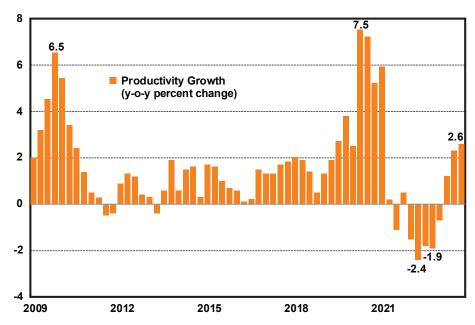
The U.S. labor force has expanded by nearly 2% since early 2020, before the pandemic, even as record numbers of baby boomers retired, in large part because of immigration. Foreign born workers now make up a jaw-dropping 18.6% of the labor force, up from 16.3% a decade ago. From 2020 to 2023, nearly 4 million immigrants joined the labor force, a 13.7% increase, far outpacing the nativeborn population which rose by 2.6 million over this period (or a 2% increase). A rise in the labor force has taken some pressure off the overly tight labor market by slowing wages and tampering inflation.

After collapsing in 2022, productivity growth rose solidly for the last three guarters of last year and is currently above its historical trend (Figure 27). Of course, it is too soon for this surge in productivity to be attributed to AI as benefits in this area will likely take a while to fully materialize. It is more likely that productivity gains are due to the normalization of the supply chains after the pandemic, which means that a portion of the boost may be somewhat short-lived. The historical post-financial crisis productivity growth rate has been around 1.6% — a full percentage lower than recent numbers. Nonetheless, the pickup in productivity growth contributed greatly to the surprising performance of the U.S. economy over this past year.

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From 2020 to 2023. nearly 4 million immigrants joined the labor force, a 13.7% increase, far outpacing the native-born population which rose by 2.6 million over this period (or a 2% increase).

FIGURE 27 **Productivity Has Picked Up After Collapsing** (y-o-y percent change)



Our view is that the strong performance of the U.S. economy will continue in the short run. In fact, instead of a soft landing, we expect a "no landing" scenario, where growth is not only resilient but reaccelerates in the short term. Recent data are already pointing to some growth pick-up ahead. The labor market added a total of 303,000 jobs in March, the highest since last May, blowing past all expectations. The pace of job formation has actually picked up instead of ebbing: from 212,000 in Q3 and Q4 of last year to 278,000 in the first quarter of this year.

Indeed, there are good reasons for optimism in the short run, as the factors that helped propel the economy last year are still firmly in place. U.S. consumers are sitting on an estimated \$800 billion of excess savings, enough to last the remainder of the year. Strong equity market gains and a rapid increase in home prices have delivered an unprecedented rise in household net worth, from \$110 trillion in the fourth quarter of 2019 to a current \$147 trillion, a 33% increase, the fastest rise in a four-year period. As we predicted, the resumption of student debt repayments has not made a dent in the economy, not in the least because the administration has found ways to forgive an estimated \$147 billion student loan debt— around a third of the original estimate. More seems to be in the pipeline as Mr. Biden is slated to unveil additional student loan relief as of this writing. It must be an election year!

The stock market rally, concentrated throughout last year primarily to tech stocks, is broadening out and has currently stretched to cyclical sectors, a bellwether for consumer spending. Despite a small downtick in January (latest available data), production of oil and gas is currently hovering near historical levels: 12.9 million barrels of oil per day and 124 billion cubic feet per day of natural gas. The bulk of infrastructure spending and government funds for green energy and semiconductors has yet to be allocated, which means some more fiscal support should trickle through the pipeline. Another tranche of the CHIPS funds was just distributed. Taiwan Semiconductor Manufacturing Co. (TSMC) was the main beneficiary, receiving a lavish \$11.6 billion in federal financing to build a third chip fab in Arizona.

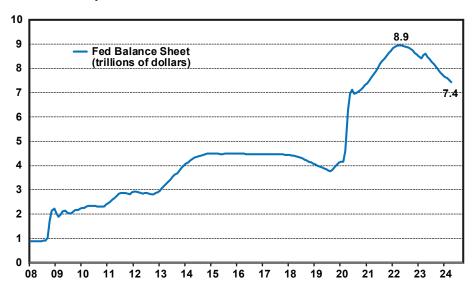
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Even troubled corners of the market have turned around. After suffering a shallow recession, corporate earnings turned positive in the second half of last year growing by a robust 4.2%. Though few companies have reported earnings for the current quarter, 83% of those that have reported have bested expectations. The manufacturing sector expanded in March after contracting for 16 consecutive months, ISM New Orders, a leading indicator of the manufacturing sector, has edged in positive territory this year. And real residential construction, which fell by a jaw-dropping 20% when the rate hike cycle began, has posted two back-to-back positive guarters, increasing by 6.7% in the third guarter of last year and 2.8% in the fourth.

Underpinning this robust outlook are tailwinds from the Fed. Though the timing of rate cuts is uncertain, they are coming, and as we argue in this report, the rate-cutting cycle will likely begin in the middle of the year. But another easing will also come from a slowdown in quantitative tightening (QT) —the process through which the Fed is currently draining excess liquidity from the system. Since early 2022, when it started raising rates, the Fed simultaneously began to shrink its balance sheet, which has dropped from nearly \$9 trillion to a current \$7.4 trillion (Figure 28).

FIGURE 28 **OT Has Drained Reserves and the Pace Will Slow Going Forward** (trillions of dollars)



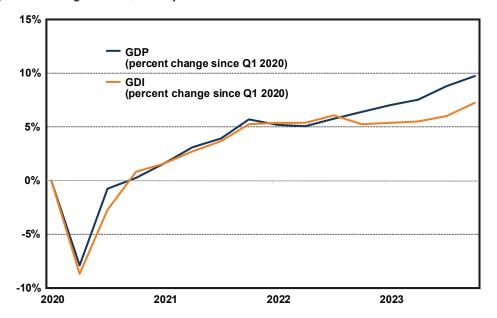
The problem with QT is that the process is not smooth: When bank excess reserves are abundant, rates are stable as they are underpinned by the rate that the Fed pays on reserves. When reserves become too scarce—as they did in September 2019— money market rates tend to be extremely volatile. For now, there are plenty of excess reserves—around \$3.6 trillion—far above the \$1.5 trillion when panic set in in 2019. That's because they have been supported by the \$2 trillion in the Fed's reverse repo facility. But that source is running low. There are only \$445 billion remaining in the facility which means that QT will begin to affect reserves more directly. No one knows for sure where the threshold is when reserves become "too low," but the Fed would do all it can to avoid it by slowing the pace of QT before they reach that point. This will be another tailwind for the economy.

Another easing will also come from a slowdown in quantitative tightening (QT) —the process through which the Fed is currently draining excess liquidity from the system. This rosy (and almost pollyannaish) outlook in the short term stands in sharp contrast with our view for the longer-run. As we argue above, the main culprit is inflation: Darker scenarios become harder to dismiss if the battle against inflation is not convincingly won. Should a strong economy and a premature easing by the Fed reignite a fresh bout of inflation, the next move by the Fed may well turn out to be a rate hike instead of a cut. It would be hard then for the economy to avoid a recession. This is not at all our baseline scenario, but the probability of such an event is not negligible.

The most likely scenario, in our view, is a stagflation-like environment, where inflation does not exactly get out of hand but remains stubbornly lodged around 3% and growth slows to stall speedat below 2%. This is hard to discern at the moment when the economy is sailing full speed ahead, but some telltale signs are emerging.

Take, for example, the yawning gap between real GDP and real gross domestic income (GDI), an alternative way of measuring economic activity, which raises some concerns about the health of the economy (Figure 29). GDI has consistently underperformed real GDP for six quarters now: According to real GDP, economic growth was 2.5% last year, far higher than the piffling 0.5% rate based on the GDI. The two measures have never been this far apart even though theoretically they should be equal. Of course, GDI almost certainly understates growth and is likely depressed due to a number of technical measurement issues related to interest payments and corporate profits, its two most poorly measured components. But even with some adjustments, last year's growth based on adjusted-GDI would be around 1.4%. Averaging between the two produces growth of 2%, fairly robust but not off the charts. Most importantly, a large positive gap between the two (when GDP exceeds GDI significantly, as is the case now) has tended to be a harbinger of doom in the past, as weaker GDI has implied an imminent recession. Just as with the yield curve, we do not think this is the case currently: The widening gap is likely indicating a downshift in economic activity rather than an impending recession.

FIGURE 29 **GDP and GDI are Telling Two Different Tales About Economic Strength** (percent change since Q1 2020)



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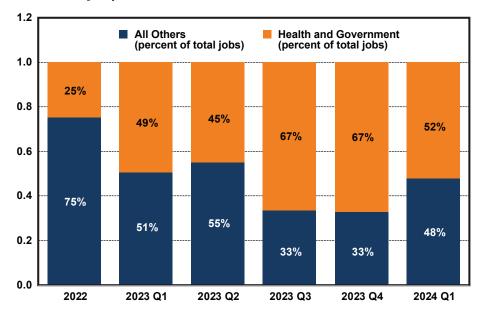
The labor market is also plagued by discrepancies. Last year, employment growth averaged a respectable 2.3% rate based on the payroll survey but only 1.7% according to the household survey. The two measures have drifted even further apart this year, with the payroll survey indicating an average annualized pace of 1.8%, far higher than the 0.5% rate posted by the household survey. The true figures likely lie somewhere in between.

Other leading indicators of the labor market are also softening. Hours worked have declined sharply, the guits rate is below pre-pandemic levels, hiring by firms is at the lowest level since 2018, and temporary jobs have collapsed at a rate eerily similar to the drop before a recession. The breadth of job formation has narrowed ominously: In 2022, 25% of the newly created jobs were in two sectors healthcare and government—and 75% in other sectors, in line with their proportional share of employment rolls (Figure 30). In 2023, these figures became dramatically more lopsided with almost two-thirds of new jobs coming from those two sectors. The first quarter of this year has rightsized these figures a bit, but not enough: 52% of the newly created jobs are still coming from government and healthcare. Historically, the job market tends to narrow before it shifts to lower gear.

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Other leading indicators

FIGURE 30 The Breadth of the Labor Market Has Narrowed (percent of total jobs)



Another disturbing trend: Most of the newly created jobs are part-time jobs. Last year, the economy added a total of 700,000 full time jobs but part time employment rolls swelled by over 1 million. The trend is even more worrisome this year: Full-time employment actually declined—by 250,000 positions — in the first quarter of this year, whereas part time employment has surged by 838,000. Perhaps this explains the dour mood of the electorate. Part-time employment hardly keeps up with the cost of living in normal times, let alone after a bout of inflation. More importantly, these dynamics—lower full-time and higher part-time employment growth- normally occur right before a recession. Given the unusual effects of the pandemic on the labor market, our view is that these indicators are pointing towards a slowdown in the labor market rather than an outright recession this time around.

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Consumer spending has been the engine of growth during this recovery. On aggregate, consumers continue to spend. But look underneath the hood, and some worrying trends begin to appear. For a while now the splurge in consumption has come from the top income of distribution: The top 20% of income earners accounted for 45% of spending over the past year, up from a historical average of 37%. The pandemic excess savings have run out for those at the bottom income of the distribution. Our estimates show that of the remaining \$870 billion, the top 20% of wage earners hold an evewatering \$650 billion— a full 74% of the total. These households are also less affected by Fed policy. Higher rates mean that they earn higher interest on their assets even as their mortgages are locked in at pandemic-level rates. Their net wealth has also risen as both equity markets and home prices soar. No wonder Taylor Swift and Super Bowl tickets continue to sell out at exorbitant prices!

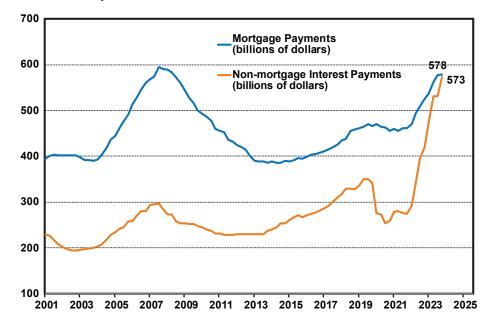
The story is similar for the second highest quintile of the income distribution. These households are tightening spending a bit, but they are by and large relatively insulated by higher interest rates. Together with the top quintile, they account for 63% of total spending, fueling growth even as interest rates remain high. That's why aggregate spending numbers continue to remain so cheery.

The picture is much grimmer for the bottom 50% of the income distribution. Though the Commerce Department does not separate data by income, it is easy to see the distress in these segments of population. Even though there have been no mass layoffs during this hiking cycle, auto and credit card delinquencies are as high as they were in 2012 when the economy was healing from the Great Recession. These households also rely more on credit cards and less on savings, even as interest rates on credit card debt reach a 30-year high. For the first time in history, this January, nonmortgage interest payments were nearly as high as mortgage payments: \$573 billion versus \$578 billion (Figure 31). This will place additional strains on consumption. Undoubtedly, this is a tale of two economies: Winter has come for the less well off.

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For the first time in history, this January, non-mortgage interest payments were nearly as high as mortgage payments.

FIGURE 31 Distress Is Rising: Non-mortgage Debt Payment is Now as High as Mortgage Debt (billions of dollars)



The slow burn for commercial real estate and its implications for the banking sector will continue to mar the outlook. As interest rates rose, commercial real estate prices tumbled. By all accounts, the rout here has barely begun, in part because depressed activity and a lack of transaction volume make valuation very difficult. The office market, in particular, is in the midst of a structural transition as pandemic adjustments and work-from-home have upended the way people live and work. Nationally, 19.6% of office space was vacant last quarter, a record since 1979, amounting to one billion square feet. It isn't clear how much valuations in this segment of the market have fallen since transactions have more or less halted, but in a few instances, discounts are running deep: In Manhattan, an office building sold for 50% less than its purchase price a decade ago; in Los Angeles, the discount was 45%.

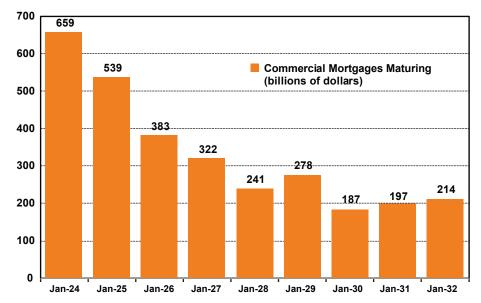
Everyone has been bracing for the distress to spread to the banking sector. Miraculously, this did not happen last year. Of the \$214 billion in real estate loans slated for maturity in 2023, none were refinanced, nor was there a sale of the underlying property. It appears that these loans were granted short-term extensions on their maturity dates, which has given both lenders and borrowers a reprieve: Losses would mount were it not for these extensions. The issue has thus been postponed since loans are not being written off and losses are not crystallized, but it has not been resolved. It also does not alter the fact that 14% of all commercial real estate loans and 45% of office loans are currently in negative equity, which means debt is higher than the property value. The risk is more acute for small and regional banks which have almost five times the loan exposure to the sector compared to larger banks.

The problem is that the looming "maturity wall" has just gotten taller: Around 40% of debt maturity due in 2024 is coming from loans that were extended in 2023. Nearly \$1.2 trillion of U.S. commercial property loans are set to mature over the next two years, much of which will likely be refinanced at higher rates (Figure 32). In 2024 alone, nearly \$660 billion in loans will come due, of which \$117 billion (18%) is in the office market. The "extend and pretend" strategy has one goal: Ride out this high-rate period and refinance when rates begin to come down. That's why a pivot to rate cuts is so vital for both the commercial real estate sector and for the banks. The problem is that rate cuts may come later and be far more modest than anticipated, given stubborn inflation. The maturity wall may need to be pushed back further, making the burn from the commercial real estate sector even slower.

Loans were granted short-term extensions on their maturity dates, which has given both lenders and borrowers a reprieve: Losses would mount were it not for these extensions.

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FIGURE 32 The Wall of Maturity for Commercial Loans Has Gotten Taller (billions of dollars)



Towards the end of Tropic Thunder, Kirk Lazarus - the method actor who's so engrossed in his roles he genuinely forgets who he is— has a moment of epiphany. He starts shedding his roles one by one, discarding different accents: "I am not Sergeant Lincoln Osiris...I am not father O'Mallie... or Neil Armstrong..." (in his natural accent) "I...I think I might be nobody." Much like Kirk, we worry that, at some point down the line, the U.S. economy-stripped down of fiscal support and pandemic savings-may end up having less oomph and strength than what meets the eye today.

Scorcher VI Global Meltdown: The World Goes to the Polls

"Whatever you're thinking, you'd better think again. Otherwise, I'm gonna have to head down there and I will rain down an ungodly firestorm upon you! You're gonna have to call the United Nations and get a binding resolution to keep me from destroying you." Hangs up the phone. "Find out who that is!"

- Les Grossman, Tropic Thunder

Around half of the world's population — 4 billion people spread across nearly 80 countries and territories— will go to the polls this year, including those in four of the five most populous countries (India, the U.S., Indonesia, and Pakistan). The U.K. and Ireland will likely hold elections before the end of the year. There are no major national elections in continental Europe, but European parliamentary elections are slated for early June. In Latin America, six countries - Mexico, Venezuela, Uruguay, El Salvador, Panama, and the Dominican Republic- will head to the polls, with the election in Mexico (in June) drawing the most attention.

You'd think people exercising their right to vote would be greeted with joy and elation across the world. Not so. The popular press and much of the political class are approaching the "year of elections" with fear and trepidation, expecting it to unleash "an ungodly firestorm" (in the words of Less Grossman, Tropic Thunder) on the world. Heightened geopolitical tensions, challenging economic conditions (inflation in particular), increased pressure from immigration, globalization, and technological shifts which have fueled the rise in populism across the world - have stoked fears that this year's elections may disrupt liberal democracy and upend the current geopolitical and economic order.

We disagree. On this point, we are significantly more sanguine than the consensus (and the press). Elections, if free and fair, represent the most compelling case that autocracy is not the wave of the future. Of course, not all elections are free and fair: In Russia, Vladimir Putin won a record-post Soviet landslide victory with 87% of the vote. In Azerbaijan, its long-term dictator won with over 90% of the vote. The surprise in both cases was that the dissent vote came up to double digits. Elections have been cancelled outright in some places: Ukraine, Senegal, and Mali have all suspended elections. Burkina Faso, Chad, and Niger have all recently had coups. Elections in Bangladesh and Pakistan (held in January and February, respectively) were marred by violence and chaos resulting in the least free democratic elections in decades.

However, in places where elections were free and fair, results have been unquestionably more heartening. William Lai Ching-te of Taiwan's Democratic Progressive Party - which rejects China's claims of sovereignty over Taiwan — was triumphant, voted on by an electorate that was not intimidated by Chinese threats. Turkey's Tayyip Erdogan (a strongman of sorts) and his party suffered their biggest electoral blow in local elections in over two decades of rule. In Portugal and Finland, elections have swung to center-right parties, and though populist factions are on the move, it is unlikely they will govern anytime soon.

Around half of the world's population— 4 billion people spread across nearly 80 countries and territories— will go to the polls this year, including those in four of the five most populous countries (India, the U.S., Indonesia, and Pakistan).

This is not to say that populism won't matter: Given their gains over the last few years — populist parties won 20% of seats in the Portuguese parliament and 25% in the Netherlands-populism will play an important role in policy matters for some time to come. Economists, including us, are not enamored with populism for good reasons: It oftentimes is synonymous with irresponsible and unsustainable policies that usually end in disasters, harming those at the bottom income of the distribution the most. Political populism, which seeks to undermine liberal, pluralist, democratic norms, is particularly harmful. But a version of populism—economic populism—if done right and with a light touch, may help address some imbalances that the current hyper-globalized system has produced: a widening income inequality, economic insecurity, displaced jobs, and fragile supply chains.

Amidst the dozens of elections taking place this year, the U.S. election is by far the most important, dwarfing everything else. Divining the outcome of any election is a challenging affair even in normal times, one we purposely stay away from having already a Herculean (and humbling) task on our hands in forecasting economic trends. But these are not normal times and election results are even less clear-cut than in previous cycles. And a veritable geological age stretches between now and Election Day, which means much can change between now and then.

But we do know a few things. The presidential race seems set between the current incumbent (Democrat Joe Biden) and the former president (Republican Donald Trump). You'd have to go back to 1892 for a similar rematch between an incumbent president and a former one. Back then, the sitting incumbent (Benjamin Harrison, a Republican) lost to the challenger (Grover Cleveland, a Democrat). The 2024 presidential race is a dead heat as of this writing: Trump has maintained a lead in polls over Biden in recent months, but it has shrunk over time. Biden's approval rating is currently a bit below Trump's at this point in his first term. Both are below the 50% mark.

Control of Congress also appears to be a toss-up, especially for the House of Representatives. Generally, big swings in the House occur during midterms rather than in presidential elections. The average net change in House seats over the past seven presidential elections is eight seats, much smaller than the average 24 seats in midterm elections. Majority control of the House has not switched parties in a presidential election year since 1952, which suggests that Republicans should retain control. They also hold a small edge in the Real Clear Politics generic polling average (of 1.6%). However, the margins of Republican control are so thin (219 to 213, with three vacant seats), that Democrats need to flip only a handful of seats to retake the House. The redistricting of some congressional seats in New York, Wisconsin, and Louisiana, under the new congressional maps, favors Democrats (Louisiana's redistricting is yet to be adjudicated in court).

Bucking these trends is the Senate, where odds significantly favor Republicans. Start with the Senate election map: 34 seats are up for grabs, of which 20 are held by Democrats, 11 by Republicans, and the remaining three by independents who caucus with the Democrats. This means that from the get-go, the Democrats need to "defend" more than twice as many seats as Republicans. Some are in states that Mr. Trump won by large margins in 2020: West Virginia, Montana, and Ohio. Others are in swing states, which means tight races: Wisconsin, Arizona, Nevada, Michigan, and Pennsylvania. Republicans may even win an unexpected race in deep blue Maryland, as a former popular Republican governor, Larry Hogan, has opened a sizable lead on his opponent in the polls. There are much fewer opportunities for Democrats to flip seats: The most promising are Florida and Texas, but both appear to be long shots.

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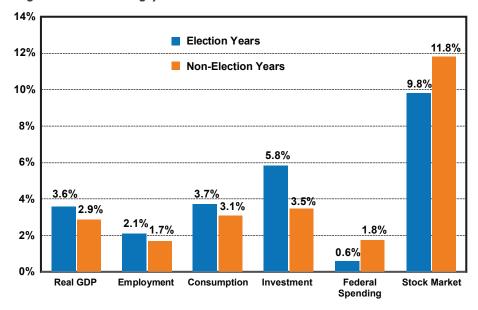
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With these trends, a Democratic sweep of the White House, the House, and the Senate, seems unlikely. This leaves the other two possibilities: either a divided government or a Republican sweep. Our view is that the first scenario— a divided government — is the more likely outcome, which means that some degree of gridlock in policymaking is likely to prevail over the next two years. This has spelled doom in the past as fiscal cliffs and government shutdowns have harmed growth and unnerved the markets. Our hope is that the gridlock this time around may bring something more benign: a much-needed restraint on profligate spending and less extreme policies.

Much has also been made about the impact of elections on economic activity, with some suggesting that politicians juice the economy right before re-elections, and others arguing that the uncertainty surrounding elections forces businesses to delay investments, thus harming growth. Our view on this is also more upbeat than the consensus: Our analysis shows that the economy performs generally better during election years, but not because it is being propelled by undue fiscal largesse. Having said that, as we argue in this report, this year is different, and fiscal support is one of the primary reasons why growth has defied gravity.

Take, for example, real GDP growth: In the data we analyzed (from 1960 to 2019, excluding the 2020 elections), real GDP grew on average by 2.9% in non-election years, and by a heftier 3.6% during election years. Same goes for other indicators: Growth in nonfarm payrolls averaged 2.1% in election years, and 1.7% in other years (Figure 33). Personal consumption rose on average by 3.7% during elections versus 3.1% in non-election years. The true outperformer is business investments, which tends to grow by a hefty 5.8% in election years, far outstripping the more pedestrian 3.5% pace in other years. This indicates that there isn't much to the story that businesses tend to hold off big investment decisions in election years waiting for the dust to settle.

FIGURE 33 **Elections Do Not Have a Large Impact on the Economy** (average annualized change)



The stock market also tends to outperform, though results here depend on whether results from 2008 — a catastrophic year for the market when returns fell by 36% — are included or not. Without it, average stock returns in election years average 13% - higher than the 11% in non-election years. With it, returns during election years fall a bit below 10%. Most importantly, this outperformance is not juiced by fiscal support: Federal government spending rises on average by 0.6% in election years, far less than the 1.7% rate in non-election years.

With these trends, a **Democratic sweep of** the White House, the House, and the Senate. seems unlikely. This leaves the other two possibilities: either a divided government or a Republican sweep.

Our analysis shows that the economy performs generally better during election years, but not because it is being propelled by undue fiscal largesse.

Slicing the data further, based on the party that occupies the White House in an election year, it appears the economy performs slightly better when a Republican is in power, but not by much. Real GDP growth has averaged 4% under Republicans and 3.2% under Democrats during election years. Similar trends can be seen for personal consumption (3.9% vs. 3.5%) and business investments (5.6% vs. 6%). Employment growth is identical no matter who occupies the White House. The stock market performs better in election years under Democratic leadership (13.3% returns) than Republican ones (12%). The true outlier is fiscal support. Federal spending has grown by an average of 1.1% in election years when a Democrat occupied the White House, more than five times as much as in a Republican administration. Federal spending this year will outstrip by far the historical average: Government consumption and investment grew by 6.7% in 2023, the highest since the 2008 financial crisis. More spending is on tap for this year.

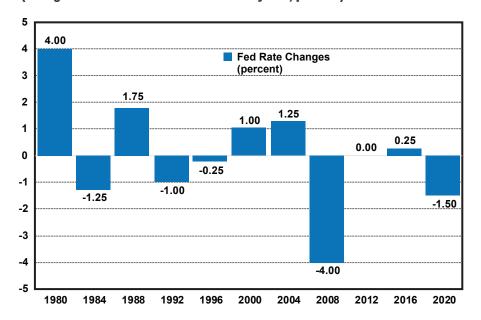
The Fed also does not seem to dance to the drumbeat of election years. Since 1980 (when interest rates became the primary tool), the Fed has either raised or cut rates in every single election except 2012, when interest rates were at the zero lower bound and the economy was still healing from the financial crisis (Figure 34). There were cases when the Fed either initiated a new monetary cycle or reversed an existing one during an election year. For example, in 1988, it started the year with rate cuts but reversed course and hiked through August. In 2004, it commenced a rate hiking cycle, though from a very low base of 1%. The number of moves is similar in election and non-election years: an average of 2.7 times and 2.9 times, respectively. The direction of the move is also evenly split: 5 rate hikes and 5 rate cuts (though the only hike in 2016 came after the election). The pace of easing or tightening also seems to be similar: 165 basis points hike versus a 160 cut.

In short, macroeconomic dynamics and not election calendars have been the primary driver of Fed policy. If there is an area where Fed officials show some sensitivity to the election cycle, is in the timing of moves. Indeed, looking across election years, the FOMC rarely changes course (such as starting a new cycle) immediately before election day. Instead, it has opted to maintain its charted course through the election, whether during an ongoing hiking cycle (2004), easing (2008), or remaining on hold (1996, 2012, 2020). A review of the FOMC transcript for the November 2016 meeting (which occurred one week before the election) indicates that policymakers were reluctant to begin rate hikes— the first in over 12 years—right before an election. This reluctance to step in the midst of an election fray makes us think that a rate cut is unlikely in September- the last FOMC meeting before the 2024 election—though we do not rule it out.

Slicing the data further, based on the party that occupies the White House in an election year, it appears the economy performs slightly better when a Republican is in power, but not by much.

The Fed also does not seem to dance to the drumbeat of election years. Since 1980 (when interest rates became the primary tool), the Fed has either raised or cut rates in every single election except 2012, when interest rates were at the zero lower bound.

FIGURE 34 The Fed Does Not Pay Much Attention to the Election Calendar (change in federal funds rate in election years, percent)



Though election season is not yet in full swing and candidates' positions not quite as clear cut, we have some sense as to what four more years of either Mr. Trump or Mr. Biden would mean in terms of fiscal policy. By far, the biggest difference between the two is the expiration of large parts of the Tax Cuts and Jobs Act (TCJA), which brought sweeping changes to the federal tax cute: The corporate tax rate

was slashed from 35% to 21%, individual tax rates were reduced across the board, and standard deductions doubled. While the reduction in corporate taxes was made permanent under the TCJA, many changes to the individual income tax code (lower tax brackets, higher standard deductions, expanded child credit), as well as some tax increases (elimination of personal exceptions, the cap on state and local tax deduction, etc.) are slated to sunset at the end of 2025.

Mr. Trump's position is straightforward: He has signaled a willingness to extend all provisions of the TCJA. On the corporate side, he wants to go even further, reducing the corporate tax rate from the current 21% to 15%. Given the intricacies of legislature procedures (Republicans would need 60 votes in the Senate to make these tax cuts permanent), the changes would sunset again roughly a decade down the line.

Mr. Biden's position is more nuanced: He would extend the current provisions of TCJA for individuals making less than \$400,000 per year but allow it to expire for top earners. Accounting for the bout of inflation over the past three years, the 400,000 threshold is equivalent to \$487,000 currently, but Mr. Biden's plan makes no adjustment for this. Biden has also proposed an increase in the top marginal tax rate from the current 37% to 39.6%, as well as a minimum 25% income tax on the wealthiest taxpayers. Biden would also raise the corporate tax rate from 21% to 28%. Multinational corporations will also see an increase in tax rate from a current 10.5% to 21%. Another change: Biden would increase the excise tax on corporate stock repurchases (enacted in the Inflation Reduction Act (IRA)) from 1% to 4%.

On spending, Trump has proposed a 2% per year baseline cut for nondefense discretionary spending (through 2030). He also plans to repeal the IRA, Biden's signature accomplishment on climate change. In contrast, Biden is planning on additional splurges to address climate change, expand international aid, and increase various subsidies for low-income earners (chief among which is the earned income tax credit, which receives quite a bit of support also from Republicans). Should Biden win his reelection bid and if one of the chambers of Congress is in the hands of Republicans, he would also need to negotiate parts of the CHIPS bill: Most of the \$200 billion funding for research and development was authorized, not appropriated, which means it is up to Congress to pass budgets to allocate the promised amount. If Trump wins and faces a divided Congress, he is likely to extend part of the TCJA but will be unable to repeal the IRA.

There are some similarities, however, between the agendas of Trump and Biden. Both are enamored with industrial policy: Trump's wish list is similar to Biden's (infrastructure, chips manufacturing) but without the green agenda. Both are averse to trade deals. On tariffs, Biden will likely keep the status quo, while Trump is likely to increase tariffs on Chinese goods even further. Most importantly, budget deficits are set to explode under either administration: The budget for the first six months of this fiscal year already hit \$1.1 trillion and interest payment on the debt is forecasted to reach \$870 billion, higher than the \$844 billion that the nation will spend on defense in 2024. According to the Congressional Budget Office, the share of publicly held debt as a percent of GDP will balloon from 97.3% in 2023 to 116% by 2034, and this baseline assumes no recession or unexpected adverse outcome over the 10-year horizon. For reference, debt as a percent of GDP was only 39% as recently as 2008.

It appears that the answer to the question we posed earlier in the report —whether we have overspent for "the stairway to heaven" — is an unqualified "yes." But we are eternal optimists: Read further and the lyrics turn hopeful. "Yes, there are two paths you can go by, but in the long run, there's still time to change the road you're on." Let's hope our politicians heed this calling and change the road they're on.

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ORANGE COUNTY, SOUTHERN CALIFORNIA AND CALIFORNIA

The performance of the California and regional economies stands in stark contrast to the national picture. While the U.S. economy has thrived, the state and local economies have stumbled, or at a minimum, grown at lackluster rates. The state is grappling with a myriad of pressing issues: Slower employment growth, tech layoffs, a housing crisis, a homeless crisis, and eve-watering budget deficits. The overall health of the regional economies of Southern California (which includes Orange County, Los Angeles County, Ventura County, and the Inland Empire) was rather mixed last year. In some ways, rather ironically, our previous forecasts of slowing growth came closer to being correct for California and the Southern California region than for the national economy.

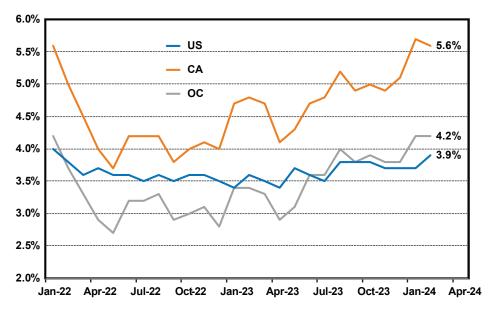
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Employment and Demographics

While the national economy was resilient in 2023 and is humming along so far this year, California has not done as well. It has the dubious distinction of having the highest unemployment rate among all states at 5.3% in February 2024 (latest available data) compared to the national rate of 3.9% (Figure 35). Household employment growth has turned negative in the last three months. It averaged -0.3% on an annual basis in the last six months compared to the U.S. growth of 1.3%. Payroll employment looks a bit healthier but barely, growing by an anemic 0.9% in 2023 and staying flat so far this year (the annualized average rate for the first two months of the year was 0.03%). This is far below the national payroll job growth of 2.3% and 1.1%, respectively. All sectors appear to be growing more slowly except for healthcare, education, and government. The leisure and hospitality sector appears to have lost its oomph lately after growing by 17.7% in 2022 and by 4.1% in 2023. Construction employment, however, is showing some sign of recovery. The sluggish pace of job growth has widespread implications, including for the state budget, as discussed below.

In some ways, rather ironically, our previous forecasts of slowing growth came closer to being correct for California and the **Southern California** region than for the national economy.

FIGURE 35 **Unemployment Rates Have Edged Up for California and Orange County** (unemployment rate, percent)



While the national economy was resilient in 2023 and is humming along so far this year, California has not done as well. It has the dubious distinction of having the highest unemployment rate among all states at 5.3% in February 2024.

The high-tech sector, in particular, has suffered from various layoffs as tech-session— the mini-recession experienced in the tech sector in 2022— plagued the sector due to a tightening of monetary policy, rising uncertainty, and the failure of key tech financial institutions. Though this is a nationwide phenomenon, the tech sector has had a much more challenging time in California than elsewhere over the past 18 months. For example, the U.S. has not vet seen drops in employment during the tech-cession: Job growth has slowed to a crawl- from 308,000 in 2021 to 180,000 in 2022, to a mere 32,000 in 2023 — but it has not declined. In contrast, California has shed 21,000 jobs in computer systems design, 15,000 in streaming and social networks, 11,000 in software publishing, and 7,000 in web search and related categories. Though the data is still preliminary, it appears that Texas has been the single largest destination for net outmigration of California information sector workers, followed by Washington, New York state, and Oregon.

California also has a reputation as an expensive and difficult state to do business in. Much of this has to do with regulations but recently it also hiked the minimum wage, though not for all sectors. Beginning April 1, the minimum wage for fast-food workers went up to \$20 an hour, the highest in the nation. A number of states have also recently raised their minimum wage, but nowhere near as high as California. The push for higher wages has come as much from the recent bout of inflation as the fact that minimum wages have not been raised for some time (though this is the case for other states rather than California, where the minimum wage has been adjusted upwards for many vears now).

Economic theory is clear about the negative effect minimum wage laws have on employment (i.e., by decreasing employment), but there are conflicting empirical studies on the magnitude of the effect. Similarly, whether increases in minimum wage reduce poverty is subject to debate. But the California action in raising the minimum wage only for a subsector of the economy, fast-food firms above a certain size, will surely lead to market dislocations. Since the minimum wage applies to large chains (those that have at least 60 establishments), it will unquestionably harm employment at large employers, though it is unclear whether small employers will benefit.

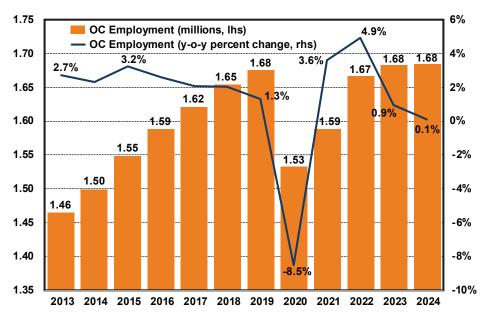
Similar to the state, Orange County has also been on a slower growth path since the middle of 2023. Its unemployment rate has ticked up, rising to 4,2% in January and February 2024 from 3.4% a year ago. This is unusual because, historically, Orange County has been able to maintain relatively low unemployment rates compared to the nation. Household employment growth has turned negative, averaging -0.2% on an annualized basis over the past six months.

Payroll jobs paint a bit more upbeat picture. According to this survey, employment grew by a robust 4.9% in 2022 and a much more disappointing 0.95% in 2023 (Figure 36). Nonetheless, most of the weakness in payroll employment can be attributed to the first nine months of last year when the average pace of growth was only 0.9%. In contrast to the household survey, payroll employment has picked up lately: In the last six months, the county's payroll employment grew by 1.2%. Over the past twelve months, Healthcare and Educational Services experienced the largest growth, with over 15,000 jobs (5.9%) (mostly in Healthcare and Social Services), followed by Leisure and Hospitality with a gain of 4,600 jobs (2.1%), and Government with 4,000 jobs (2.5%).

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Similar to the state, **Orange County has also** been on a slower growth path since the middle of 2023. Its unemployment rate has ticked up, rising to 4.2% in January and **February 2024 from 3.4%** a year ago.

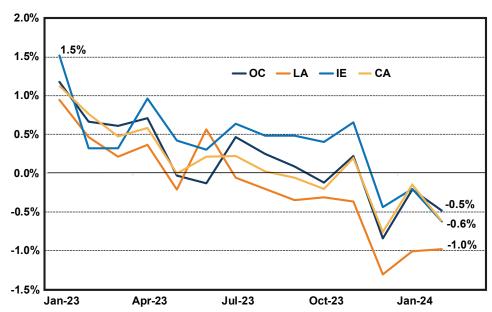
FIGURE 36 **Orange County Job Growth Has Stalled Recently** (millions and y-o-y percent change)



Labor force growth in the county and the state has averaged 0.7% in the last six months, less than half the national average, which rose by 1.5% over this period. This means that the higher unemployment rates in the state and the county cannot be attributed to faster labor force growth, but rather to weaker job formation.

In Los Angeles County and the Inland Empire, the stories are somewhat similar. The current unemployment rate in Los Angeles County is hovering around 5%, close to where it was a year ago. Based on the household survey, employment growth averaged 0.7% over the past six months, but this figure obscures more troubling recent trends which show that employment has fallen over the last three months. The payroll survey paints a similar picture: After growing by 5.3% in 2022 and by a paltry 0.23% in 2023, payroll employment has fallen by an annual rate of 0.2% over the past six months (Figure 37).

FIGURE 37 **Job Growth Has Weakened Everywhere** (y-o-y percent change)



Focusing on employment sectors for Los Angeles County, the Healthcare and Educational Services sector gained the most jobs over the past 12 months, growing by 45,000 (5%) (mostly in the Healthcare and Social Services subsector), followed by Government with 11,000 jobs (1.9%). But the high-tech sector has fared badly: The Information industry lost a staggering 36,000 (16.8% of its workforce) over the past 12 months. Almost all these losses occurred in the Motion Pictures and Sound Recording subsector. It appears that the recovery from last year's strikes in the industry has been exceptionally sluggish and employment levels may never get back to prior peaks, at least not for a while.

The unemployment rate in the Inland Empire was 5.5% in February 2024, one percent higher than a year ago. The household survey shows a decline in jobs on a year-over-basis for the last three months and no growth in the last six months. The payroll survey paints a slightly brighter picture: employment rose by a 1.4% annual rate in the last six months after growing by 5.4% in 2022 and by 1.2% for the entirety of 2023.

The largest industry in the Inland Empire, Transportation, Trade and Utilities, lost 8,100 (1.8%) jobs over the past 12 months. The largest gains were in Healthcare and Educational Services where employment rolls swelled by 21,000 (4.9%). The Government sector added 12,800 jobs (5%) and Construction gained 4,300 new positions (3.9%).

Taking a look back, it is worth noting that despite rapid employment growth over the past few years, the labor market has simply clawed its way past the pandemic abyss. Indeed, when looking at the data, the U.S., state, and local economies are barely ahead of the pre-pandemic employment levels. This means that, simply put, the last four years have been a waste, with most of the growth taken out of the economic life of the country. When all is said and done and the history of this period is written, we will know more about the socio-economic losses and other changes wrought by the pandemic but there is little doubt of its enormous economic cost.

The loss in economic vitality is best illustrated by comparing the four years since the pandemic to the previous four years. As seen in Table 1, Orange County payrolls grew by a paltry 0.2% from February 2020 to February 2023, far below the 7.4% growth posted in the four-year period prior to the pandemic. A similar picture emerges elsewhere: Los Angeles County's employment rose by 1.5% over the past four years, compared to 6% in the previous four years. The figures for the Inland Empire are 6.3% vs. 15%, for California 1.5% vs. 8.3%, and for the U.S. 3.6% vs. 6.2%.

TABLE 1 The Toll of the Pandemic (cumulative changes in payroll employment)

	BEF	ORE	AFTER		
	Feb 2016	-Feb 2020	Feb 2020-Feb 2024		
Orange County	116,100	7.40%	3,200	0.20%	
L.A. County	260,100	6.00%	-71,400	1.50%	
Inland Empire	206,800	15.00%	99,400	6.30%	
California	1,342,200	8.30%	268,600	1.50%	
U.S. (total in thousands)	8,898	6.20%	5,521	3.60%	

The high-tech sector has fared badly: The **Information industry** lost a staggering 36,000 (16.8% of its workforce) over the past 12 months. Almost all these losses occurred in the Motion **Pictures and Sound Recording subsector.**

Despite rapid employment growth over the past few years, the labor market has simply clawed its way past the pandemic abyss. Indeed, when looking at the data, the U.S., state, and local economies are barely ahead of the pre-pandemic employment levels.

How impactful will AI be to employment?

We were less than convinced last year at this time that the economy would grow as confidently as it did, given the backdrop of high inflation and rapidly increasing rates that characterized the macroeconomic outlook at that time. In retrospect, the boost from phenomenal government spending and the recovery from the pandemic proved to be much stronger than anticipated. It's not just fiscal support and a healthy recovery: The unexpected rapid growth of Artificial Intelligence (Al) innovations injected a huge dose of optimism in the economy last year, led by a handful of mega-firms — the Magnificent Seven (now four or five). The stock market has been euphoric, setting new highs almost every week, but there are also issues related to the opportunities as well as challenges that the new technologies pose both in the near and long term.

One important and tantalizing question being discussed today is how Al and robotics technologies will affect future employment. Technological changes are perennially considered a threat to employment as most innovations tend to lead to labor-saving processes. But the breadth and speed of robotics and artificial intelligence have awoken much greater concerns, with some fearing that these innovations, with their unparalleled capabilities, constitute a clear break from previous technologies. The ability for text and video processing, natural language processing, pattern recognition and the capacity to learn and improve rapidly in relatively autonomous ways constitute a new type of technological change, as profound as some of the most radical, major innovations of the past, such as electricity. It is presumed that this would lead to widespread job losses in many sectors of the economy. For example, one well-cited study (Frey and Osborne, The Future of Employment, Oxford Martin) has argued that 47% of U.S. jobs will be at risk of automation by 2030.

The current literature lists various examples of sectors that are more likely to be affected in the near term. While it is not possible to go through a detailed analysis of the academic literature here, we thought it would be interesting to see to what extent Orange County employment, relative to that of other regions, may be affected by these technological changes. We take as our starting point a Department of Labor study (Growth trends for selected occupations considered at risk from automation: Monthly Labor Review, July 2022), which identified 20 sectors likely to be most affected by robotics and Al technologies. Using the Occupational Employment and Wage Statistics (OEWS) data, we calculate the proportion of jobs in these industries relative to total employment to determine how sensitive the overall employment is to potential changes in these industries (Table 2). The industries are divided into two sets, the most impacted sectors and the second most impacted sectors.

It's not just fiscal support and a healthy recovery: The unexpected rapid growth of Artificial Intelligence (AI) innovations injected a huge dose of optimism in the economy last year, led by a handful of megafirms — the Magnificent Seven (now four or five).

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TABLE 2 **Jobs Impacted by Al** (percent of total employment)

	ос	LA	RV	CA	US
Total May 2022 OEWS Employment	1,629,090	4,470,850	4,470,850	17,635,840	147,886,000
Most Impacted					
Personal Financial Advisors	0.25%	0.20%	0.06%	0.19%	0.19%
Interpreters and Translators	0.02%	0.03%	0.03%	0.04%	0.04%
Doctors	0.29%	0.33%	0.25%	0.33%	0.45%
Detectives and Criminal Investigators	0.05%	0.05%	0.08%	0.06%	0.07%
Janitors and Cleaners	1.83%	1.35%	1.22%	1.40%	1.45%
Maids and Housekeeping Cleaners	0.52%	0.42%	0.52%	0.50%	0.52%
Landscaping and Groundskeeping Workers	0.70%	0.35%	0.81%	0.60%	0.62%
Heavy and Tractor-Trailer Truck Drivers	0.62%	1.03%	2.28%	1.06%	1.34%
Industrial Truck and Tractor Operators	0.34%	0.39%	2.26%	0.58%	0.53%
Laborers and Freight, Stock, and Material Movers, Hand	1.96%	2.04%	4.92%	2.13%	1.98%
	6.59%	6.18%	12.43%	6.87%	7.20%
Second Most Impacted Sectors					
Loan Officers	0.47%	0.19%	0.14%	0.22%	0.23%
Tax Preparers	0.12%	0.09%	0.05%	0.07%	0.06%
Computer Programmers	0.09%	0.06%	0.01%	0.31%	0.09%
Paralegals and Legal Assistants	0.34%	0.37%	0.08%	0.21%	0.23%
News Analysts, Reporters, and Journalists	0.01%	0.04%	0.01%	0.03%	0.03%
Public Relations Specialists	0.14%	0.20%	0.07%	0.16%	0.18%
First-Line Supervisors of Retail Sales Workers	0.55%	0.55%	0.68%	0.58%	0.74%
Cashiers	2.10%	0.44%	2.54%	2.21%	2.23%
Counter and Rental Clerks	0.51%	0.00%	0.43%	0.39%	0.25%
Retail Salespersons	1.81%	1.78%	2.15%	1.86%	2.46%
Customer Service Representatives	1.44%	1.21%	1.09%	1.17%	0.11%
Telemarketers	0.08%	0.00%	0.02%	0.03%	0.07%
Shipping, Receiving, and Inventory Clerks	0.61%	0.58%	0.94%	0.55%	0.57%
Reservation/Transportation and Travel Clerks	0.05%	0.15%	0.04%	0.08%	0.08%
Farmworkers/Laborers, Crop, Nursery, and Greenhouse	0.06%	0.05%	0.36%	1.07%	0.19%
Farmworkers, Farm, Ranch, and Aquacultural Animals	0.01%	0.00%	0.01%	0.02%	0.02%
Welders, Cutters, Solderers, and Brazers	0.18%	0.15%	0.25%	0.18%	0.04%
	0.500/	5.87%	8.86%	9.16%	7.59%
	8.56%	3.07%	0.00 /0	9.10 /0	1.55 /0
	8.56%	3.67%	0.00 /0	9.10 /0	7.59 /0

Our analysis reveals that the Inland Empire, not a center of high-tech, is likely to be more sensitive than other Southern California regions to these technologies because there is simply more room for automation in sectors that have a hefty presence in the county. Roughly 21.3% of jobs in the Inland Empire seem at risk from these new technologies. Orange County's industry structure is more sensitive than that of Los Angeles County, with around 15% of jobs at risk (only 12% of jobs are at risk in Los Angeles County). This is a preliminary look and further research is needed to fine-tune this type of analysis. Also, as Al further develops, its nature is likely to change, and it will have more widespread effects across a larger set of occupations and industries.

Roughly 21.3% of jobs in the Inland Empire seem at risk from these new technologies. Orange **County's industry** structure is more sensitive than that of Los Angeles County, with around 15% of jobs at risk (only 12% of jobs are at risk in Los **Angeles County).**

This type of analysis on the occupational employment effects of these new technologies abstracts from other considerations, thus limiting the scope of the results. Oftentimes, the "scale effects" of new technologies are not taken into account. This means that it is possible, and even likely, that new technologies will increase overall demand due to productivity and income gains that come from their deployment, even as they reduce demand for current workers. For example, these technologies could further automate warehousing operations through enhanced deployment of Al, thus lowering retail prices and enhancing e-commerce. This will lead to greater demand for goods. It will also offset some of the direct job losses resulting from these new technologies.

A more subtle issue has to do with changes in task assignments within an occupation due to the deployment of these new technologies. For example, most expect that AI will dramatically reduce the need for tax accountants and manual document reviews within the legal profession. This does not necessarily mean that people assigned to these tasks will be laid off. It is perhaps more likely that such a change will enhance organizational capacity, where displaced workers could be given different tasks within their organizations. Likewise, economic and population growth will generate demand for new jobs with new skill sets, thus offsetting any potential losses arising from Al. This has been the case in the past and there is no reason to assume that it will be different in the future.

Housing

Housing is becoming the exception to the normalization process which has taken place over the past three years as the economy heals from the pandemic. Supply chain issues are mostly resolved, labor supply shortages have practically dissipated, and financial markets have by and large weathered the Fed rate hikes quite admirably. But the housing market stands out as the single major exception to this normalization. Home prices have experienced an unprecedented rise over the past four years, low housing inventory has kept housing availability extremely limited, and demand for housing continues to remain high despite skyrocketing prices.

Higher mortgage rates and low supply have cooled market activity somewhat, but home prices have escalated. Current homeowners are reluctant to let go of their low-rate mortgages, the socalled "lock-up" effect. According to one estimate, the average homeowner's monthly payment will double if they were to move up to a 25% more expensive property. The math is worse for move-up buyers who took a mortgage in 2020 or 2021 when the rates were low. A lateral move for them would mean paying 60% more each month at the current higher rates.

Restrictive zoning laws have also limited new construction. Housing costs continue to play an outsized role in the inflation picture even as rents have started to come down. Given the prospect of higher interest rates sticking around for longer, any relief for the housing markets seems distant.

In Southern California, home prices began to moderate at the start of the Fed rate hiking cycle, but not for long. Beginning in mid-2022, as interest rates marched upward, prices took a tumble. For example, the median price of a single-family home in Orange County, based on the California Association of Realtors data, fell from \$1,325,000 in April 2022 to \$1,100,000 in November 2022, a decline of 16.2% (Figure 38). But the trend reversed towards the end of 2022 and prices have been rising steadily since then, except for a slight slowdown in the last quarter of 2023. Orange County's latest median single-family house price of \$1,350,000 in February 2024 (latest available data) is the highest ever.

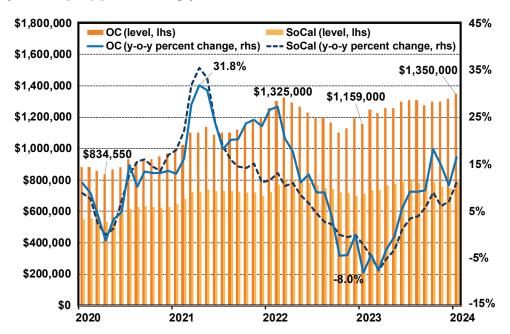
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FIGURE 38 **Home Prices on an Upswing Again** (level and y-o-y percent change)



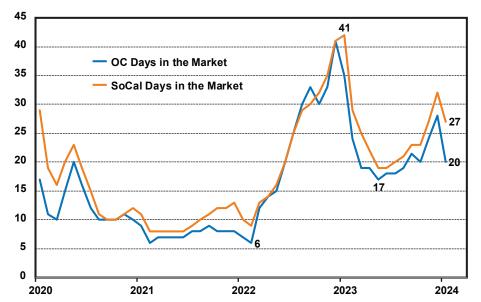
The picture is a bit more mixed for other Southern California counties. The median price of \$806,500 of a Los Angeles County home in February 2024 is still below the all-time high of \$914,600 reached in September 2023. Riverside and San Bernardino counties' current prices are a hair below the highest levels reached in 2023. Despite high mortgage rates, there appears to be a strong upward momentum for home prices in Southern California, driven primarily by a scarcity of supply and still healthy demand.

After spending billions of dollars, California is nowhere close to making an appreciable dent in the number of homeless or finding a coherent strategy to solve the problem.

Time on the market is an important indicator of activity in the housing market. This has fallen dramatically for Orange County and the Southern California region, reflecting a dearth of supply. Currently, it takes an average of 20 days to sell a house in Orange County compared to 35 days a year ago, and 27 days for the Southern California region compared to 42 days a year ago (Figure 39).

The lack of affordable housing makes it harder to find solutions for the difficult problem of homelessness. After spending billions of dollars, California is nowhere close to making an appreciable dent in the number of homeless or finding a coherent strategy to solve the problem.

FIGURE 39 **Median Days on the Market for Homes for Sale** (days)



According to a recent report from the state auditor, California spent \$24 billion in the last five years, but the homeless population increased to 181,399 people in 2023, from 118,552 in 2013 and 151,278 in 2019. To make matters worse, the report said that the state lacks good information on the homeless population and "has not consistently tracked and evaluated the State's efforts to prevent and end homelessness."

Solving the homeless problem was Los Angeles Mayor Karen Bass' key goal for her mayorship. She declared a state of emergency on homelessness on her first day in office in December 2022. In January 2023, there were 46,000 homeless people in the city of Los Angeles, an increase of 80% compared to 2015. In her first budget, she allocated a staggering \$1.3 billion to solve the problem, 20% of which was assigned to her signature program to move unhoused people out of encampments. As of April 12, 2024, Inside Safe had moved 2,600 people indoors, half of whom were living in hotels and motels. More than a fourth of the program participants, 613 people, have returned to homelessness, 42 have been incarcerated and 38 have died, according to the L.A. Homeless Services Authority. In her latest State of the City message, Mayor Bass appealed for private sector support for her programs. Orange County had 5,718 homeless people in 2022, of whom 3,000 were unsheltered. While no official counting was scheduled for 2023, the county conducted a survey to assess how some of its programs were being used.

The problem of homelessness is exacerbated by the fact that a vast majority of the homeless also suffer from mental health issues and substance abuse. The state has just taken a giant step towards tackling these issues by passing a \$6.4 billion bond measure last month in a closely held vote. Proposition 1 was backed heavily by Gov. Gavin Newsom and many elected officials. This measure now will enable lawmakers to redirect billions of dollars to create drug and mental health treatment beds across the state in the hopes of addressing the homeless problem.

According to the Governor's office, Proposition 1 funding would create 11,150 behavioral health treatment beds across the state and 26,700 outpatient treatment slots. The bill also authorizes the building of 4,350 housing units, half of which would be reserved for veterans. Additionally, counties will now be required to change some of their mental health care and drug or alcohol treatment services, shifting some of the focus to housing and personalized support services.

In addition to the \$6.4 billion in bond money, a re-apportionment of funds generated by the 2004 Mental Health Services Act, which imposed a 1% income tax on people earning more than \$1 million per year, would give the state control over much of the funding. The annual revenue from the tax is estimated to be between \$2 billion and \$3 billion a year. Counties would be required to spend around two-thirds of the funds on housing and homeless outreach programs for people with severe mental health illness or substance abuse problems.

It is too soon to tell as to what extent this flood of money will alleviate the problems of homelessness, mental health illness and drug addiction. Judging by the close vote of Proposition 1, the public seems reluctant but willing to take a chance, reflecting our own views on the matter. Let's hope this initiative will be more successful than the myriads of programs that preceded it.

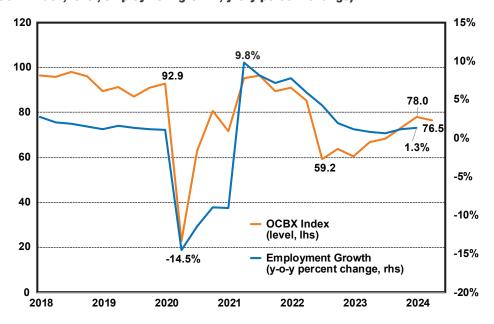
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Orange County Business Sentiment

In addition to using official data sources, the Woods Center has developed and regularly conducts a quarterly survey of business expectations for Orange County which supports our economic forecasts. This survey provides us with timely and diverse points of view in addition to being a rich source of information for business expectations and outlook over the coming quarter. Based on survey responses, we construct an overall index, OCBX, with values ranging from 0 to 100. A value for over 50 indicates expectations of the continued growth of the local economy. The index has had a good track record in predicting changes in quarterly employment and is a useful tool in signaling turning points in the business cycle (Figure 40).

FIGURE 40 **Orange County Business Sentiment Has Improved Compared to Last Year** (OCBX index, level, employment growth, y-o-y percent change)

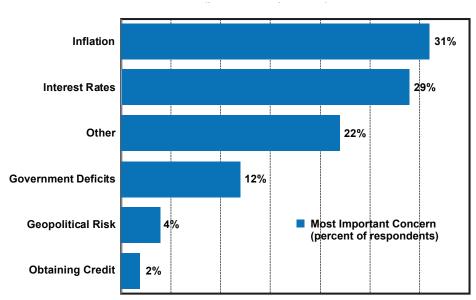


Our latest survey was conducted at the end of March 2024. The index value fell slightly, from 78 in the first quarter of 2024 to 76.5 in the second quarter. This is the first dip in the index since July 2022, when the Fed embarked on its rate hiking cycle. It is also worth noting that despite the small dip, the index is above its 20-year average of 74.2, indicating that Orange County business executives remain generally optimistic. This tilt is due to a more optimistic view regarding their businesses and the county's economy compared to the outlook for the national economy.

Inflation and interest rates (31% and 29%, respectively) both led as the top two most significant worries for businesses (inflation was the leading concern last guarter) (Figure 41). Government deficit was the third most important concern (12%), ahead of geopolitical risks (4%) and ability to obtain credit (2%). Other concerns mentioned were regulatory constraints, immigration, Al, and the election. It appears that labor shortages are no longer a concern. In response to another question, 69% of businesses expect to maintain their current workforce, with only 18% planning to hire more and only 10% expecting to decrease employment.

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FIGURE 41 **Most Important Concerns: Inflation and Interest Rates** (percent of respondents)



The survey also asked respondents their views on future inflation. Along with current inflation, expectations of future inflation play an important role in determining the future path of inflation itself. In line with recent data, inflation expectations appear to be on the upside: 8% of respondents expect inflation to be above 3.5% by the end of 2024, and 41% expect it to be between 3% and 3.5% (compared to 26% last quarter). 29% expect it to come between 2.5% and 3% (compared to 50% last quarter) and 20% expect it to be between 2% and 2.5% (18% last quarter). Another 2% expect it to fall below 2% (6% last quarter). In general, overall inflation expectations have gone up.

When asked about the first Fed interest rate cut. 76% of respondents expect it to be in the second half of 2024, with few expecting it in the first half. 14% believe the cuts wouldn't come until 2025, while 6% don't expect a rate cut for the next two years. It appears that Orange County business leaders generally believe in the Fed's pronouncements that there will be rate cuts but only in the second half of 2024.

Though in our baseline scenario we no longer expect the US economy to experience a recession over the next two years, the probability of a recession is still higher than in normal times, especially if the Fed is unable to cut rates or cuts by less than expected. Given this uncertainty, we asked our survey participants for their views on the possibility of a recession. 53% do not expect a recession, the highest number in over two years. Of these, 41% believe the U.S. economy is headed for a soft landing, while 12% think there will be no recession or soft landing, with the economy continuing to grow. From those that do expect a recession, 31% think it will be a mild one, 12% believe there will be a normal recession, with only 4% expecting the U.S. economy to experience a serious recession.

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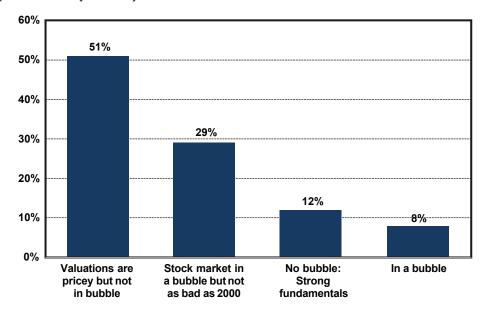
53% do not expect a recession, the highest number in over two years. From those that do expect a recession, 31% think it will be a mild one, 12% believe there will be a normal recession, with only 4% expecting the U.S. economy to experience a serious recession.

In response to the question about their outlook in 2024, 22% of respondents said they were optimistic about the near term, while 25% said they were less so than in the past two years. The vast majority, a full 43%, were cautious about the future but not pessimistic, while 10% were outright pessimistic about the rest of the year.

Also, for the first time, we asked participants about their views on equity market developments. The stock market, as measured by S&P 500, has risen by nearly 26% over the past four months. Some speculate that this may be a bubble. Others believe this performance is warranted based on fundamentals. In response to our question, the majority of respondents, 63% think the stock market is not in bubble territory (Figure 42). Of these, 51% think that while stock market valuations are pricey, they are not yet in bubble territory, while 12% believe that current valuations are justified by fundamentals such as earnings, productivity, and Al. 29% of respondents believe that the stock market may be in a bubble, but it is not as profound as the tech bubble of 2000. Only 8% of respondents think that the stock market is currently in a bubble.

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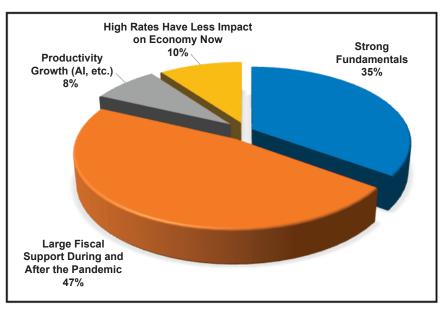
FIGURE 42 Is the Stock Market in a Bubble? Most Don't Think So (percent of respondents)



Finally, we asked business executives what explains the resiliency of the U.S. economy. Despite high interest rates, supply shocks and geopolitical crises, the economy continues to grow at a healthy pace with high employment levels. Nearly half of respondents, 47%, believe that the large fiscal stimulus during the pandemic is the main reason why the U.S. economy has sailed ahead (Figure 43). 35% think that strong fundamentals, and healthy balance sheets of households and businesses are what is keeping the economy strong. 10% of respondents believe that high interest rates no longer have the kind of drag they used to have, presumably because of structural changes in the economy. 8% think that productivity growth, likely driven by Al, is supporting current growth.

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FIGURE 43 Why is the U.S. Economy so Resilient? (percent of respondents)



The State Budget

The state budget is directly affected by the state's economy. Almost 70% of the state revenue comes from income taxes, 10% from corporate taxes, 16% from sales taxes and the remaining from other taxes. Compared to other states, California's state budget depends overwhelmingly on revenue from income taxes. Since California's fiscal year starts on July 1, there is a lack of synchronicity between the budget year and the tax year. For example, deficits incurred in the fiscal year 2022-23 are affected by tax revenue for tax year 2022, which were not due and not collected until April 2023 (and October for some businesses). The picture is further complicated by last year's extension of the tax deadline from April to November, thus moving the tax collection date out of the range of the fiscal year timeline. This delay created a revenue shortfall for 2022-23 because that year ended on June 30, 2023, before tax revenues came in. The delay is estimated to have created a \$25 billion problem for the fiscal year 2022-23.

Revenues also fluctuate greatly because they depend on highly volatile capital gains. To get around these uncertainties, budget deficits are calculated over a three-year rolling window. For example, the current fiscal year 2023-2024 will end on June 30, 2024, and the next fiscal year, 2024-2025, will begin on July 1, 2024. The rolling window to estimate deficits is 2022-2023 (last year), 2023-2024 (current year) and 2024-2025 (next year). The Governor's office estimated in January 2024 (in its first update for the 2024-2025 budget) a deficit of \$44 billion over this 3-year window (including the 2022-23 shortfall mentioned above), while the Legislative Analyst's office (LAO) estimated a deficit of \$58 billion for the period. In February, LAO revised its estimate and now expects the deficit to rise to a staggering \$71 billion for the three-year rolling window.

Subsequent revisions show that the Governor's proposed 2024-2025 budget currently has a deficit of \$38 billion. LAO's current estimate is \$68 billion (different from the three-year rolling window deficit). In May, with better information on tax collections from 2023 (which were due in April), serious legislative bargaining will begin. The deadline for the legislative approval is June 15 with the

Subsequent revisions show that the Governor's proposed 2024-2025 budget estimates that the deficit for the upcoming fiscal year would be \$38 billion. LAO's current estimate is \$68 billion.

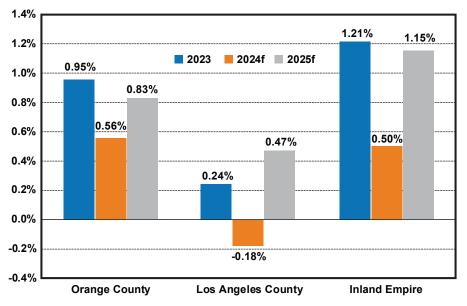
Governor approving the final budget by June 30. So far, there is little appetite for any program cuts but given the sizable gap in revenues, cuts will be inevitable. The economic assumptions underlying the January budget are suspect, given the current slowdown in the state's economy. However, the stock market performance so far this year has been exuberant. Should it continue, the state can expect higher capital gains tax revenue in 2024.

Employment Forecasts

Our view is that the last mile of the sticky inflation will not be a sprint and, in fact, may turn out to be a long drawn-out marathon. As discussed above, our outlook for the nation unfolds in two stages: A no-landing scenario in the short run with the economy continuing to grow, and stagflation-lite dynamics in the long run.

The California and Southern California economies seem to have already started on that path, with growth slowing at the end of 2023 into the early part of 2024. We see this as returning to a more normalized growth process after the upheaval of the pandemic years. For example, the average annual payroll job growth rate for Orange County over the last 25 years is 1.2% and we see it slowly returning to that rate over the next two years. We expect payroll jobs in Orange County to grow by only 0.56% (9,400 jobs) in 2024 and by 0.83% (14,100) in 2025 (Figure 44). The unemployment rate is expected to rise from the current 4.2% to 5.2% by the end of 2024 and is expected to average 4.9% for 2024 and 4.5% for 2025.

FIGURE 44 **Employment Forecasts** (annualized percent rates)



Los Angeles County's economy has been slowing and we expect it to lose jobs at an annual rate of 0.18% (-7,900) in 2024 before recovering in the latter part of 2025 for an average annual growth of 0.47% (21,400). Its current unemployment rate of 5% is expected to rise to 6% towards the end of 2024, for an average annual of 5.7% for 2024 and 5.25% for 2025. Inland Empire is also on a downward trajectory currently and we expect its 2024 payroll job growth to be only 0.5% (8,400). We expect its economy to bounce back in 2025 growing at an annual rate of 1.15% (19,400 jobs) for the year.

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